

SOCIAL ACCEPTANCE OF AGE DISCRIMINATION

By

NICK M. WISDOM

Bachelor of Science in Psychology  
Oklahoma Christian University  
Edmond, OK  
2005

Master of Science in Clinical Psychology  
Oklahoma State University  
Stillwater, OK  
2008

Submitted to the Faculty of the  
Graduate College of the  
Oklahoma State University  
in partial fulfillment of  
the requirements for  
the Degree of  
DOCTOR OF PHILOSOPHY  
July, 2010

SOCIAL ACCEPTANCE OF AGE DISCRIMINATION:

Dissertation Approved:

Dr. John Chaney

---

Dissertation Adviser

Dr. Jennifer L. Callahan

---

Dr. James W. Grice

---

Dr. Alex Bishop

---

Outside Committee Member

Dr. Mark E. Payton

---

Dean of the Graduate College

## TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION .....	1
II. REVIEW OF LITERATURE.....	6
Terror Management Theory .....	7
Social-Developmental Perspective .....	9
Communication.....	12
Ageism in the Media.....	14
Ageism in Health Care.....	17
Ageism in the Workplace.....	20
Elder Abuse.....	23
Ageism and Racism .....	25
Hypotheses .....	26
III. METHODOLOGY .....	28
Participants.....	28
Measures .....	31
Anxiety about Aging Scale (AAS) .....	31
Fraboni Scale of Ageism (FSA).....	31
Attitude Toward Old Persons scale (OP).....	32
Facts on Aging Quiz (FAQ1).....	32
Attitudes Toward Blacks (ATB).....	33
Modern Racism Scale (MRS) .....	33
Anti-Black Scale (ABS).....	34
Marlowe-Crowne Social Desirability Scale (M-C SDS) .....	34
Procedure .....	35
IV. FINDINGS.....	39
Sample Characteristics.....	39
Sample A (Ageism).....	39
Sample B (Racism) .....	39
Instructions.....	39
On-line vs. Lab.....	42
Anxiety about Aging Scale and Ageism.....	45
Facts on Aging Quiz and Ageism .....	45
Effect of Experience on Ageism Endorsement .....	47
Effect of Experience on Racism Endorsement .....	49

V. DISCUSSION .....	51
REFERENCES .....	56
APPENDIX A.....	69
Institutional Review Board & Informed Consent .....	70
APPENDIX B .....	74
Instructions.....	75
Demographics .....	76
Experience.....	78
Anxiety about Aging Scale (AAS) .....	79
Facts on Aging Quiz (FAQ1).....	82
Fraboni Scale of Ageism (FSA).....	89
Attitude Toward Old Persons scale (OP).....	93
Marlowe-Crowne Social Desirability Scale (M-C SDS) .....	96
APPENDIX C .....	99
Instructions.....	100
Demographics .....	101
Experience.....	103
Attitudes Toward Blacks (ATB).....	104
Modern Racism Scale (MRS) .....	108
Anti-Black Scale (ABS).....	110
Marlowe-Crowne Social Desirability Scale (M-C SDS) .....	112

## LIST OF TABLES

Table	Page
TABLE 1, Means, Standard Deviations, and Range for Demographic Variables.....	29
TABLE 2, Summary of Conditions and Associated Measures.....	38
TABLE 3, Means, Standard Deviations, and Range Differences for Instructions .....	41
TABLE 4, Means, Standard Deviations, and Range Differences for Groups .....	43
TABLE 5, Correlations Between Ageism Measures .....	46
TABLE 6, Correlations Between Experiential Questions and Ageism Measures.....	48
TABLE 6, Correlations Between Experiential Questions and Racism Measures .....	50

## CHAPTER I

### INTRODUCTION

There are approximately 37 million people over the age of 65 living in the United States, accounting for 12 percent of the total population. This number is expected to grow exponentially as the Baby Boomers (those born between 1946 and 1964) are likely to experience unprecedented longevity. At the current growth rate, it is projected that the number of elderly individuals living in the United States will double, representing 20 percent of the total population, by the year 2030 (Federal Interagency Forum on Aging-Related Statistics, 2008). This dramatic change in the demographic landscape presents a number of novel challenges for today's society. Unfortunately, these changes also highlight a form of prejudice and discrimination that must be addressed.

Ageism is systematic stereotyping and discrimination against individuals based on their age (Butler, 1987). Although the term ageism can refer to the stereotyping of younger individuals, it is most commonly associated with negative attitudes and behaviors toward the elderly. This form of discrimination is widespread and is infused in all aspects of older adults' lives. Research in this area has consistently documented ageism in the way people communicate with older adults (Montepare, Steinberg, & Rosenberg, 1992; Rodin & Langer, 1980), in the media (Arluke & Levin, 1984; Aronoff, 1974; Carmichael, 1976; Donlon, Ashman, & Levy, 2005; Signorielli, 2004), in health care settings (Butler et al., 2006; Du, Key, Osborne, Mahnken, & Goodwin, 2003; Hajjar, Miller, & Hirth, 2002; Keeler, Solomon, Beck, Mendenhall, & Kane, 1982), in the workplace (Avolio & Barrett, 1987; Bendick et al., 1999; Davis, Smith, & Marsden, 2003; McCann & Giles, 2002) and in society's response to elder abuse (Butler et al.,

2006; Pillemer & Finkelhor, 1988; Wolf, 1999)

In comparison to other stereotypes, age discrimination remains largely overlooked by society because people have only recently lived well into old age. From 1900 to 2004, life expectancy at birth increased from 46 to 75 years for men and 48 to 80 years for women (National Center for Health Statistics, 2007). These extraordinary advancements in age have resulted in a greater percentage of adults experiencing cognitive and physical decline which has led to the perception that they are a burden to their families and community. Furthermore, the cultural shift from agrarian economies, where older men had traditionally owned the land, to industrialized economies has also reduced the authority of older persons in the home (Butler et al., 2006). Although the novelty of old age partially explains the prevalence of ageism, there remain multiple promising theories that propose alternative reasons for why it continues to plague older adults.

Terror management theory suggests the elderly represent the threat of diminished beauty and declining health that reminds the young of their mortality and the certainty of their eventual death (Greenberg, Pyszczynski, & Solomon, 1986; Solomon, Greenberg, & Pyszczynski, 1991). Unlike other forms of ethnic prejudice, ageism is unique in that it is the only out-group that is permeable to other groups. In other words, individuals that belong to the in-group (the young) will eventually become members of the out-group (the old) if they are fortunate to live long enough. The concept of striving to survive while knowing that death is the only certainty in life presents an existential paradox that has the potential to paralyze the young with terror (Becker, 1973). The anxiety that arises from the threat of death acts as a motivating force in which the young attempt to return to a state of emotional homeostasis. Aside from physical distancing from the elderly,

researchers have found that younger individuals will sometimes reduce their anxiety by exaggerating the differences between themselves and older populations. More specifically, the threat of death results in younger individuals believing that the elderly have an entirely different set of attitudes, interests, and personality characteristics (Greenberg et al., 2000). The young also deindividualize older adults by applying disparaging terms while also categorizing them into differing factions so that the differences between the age groups are magnified and the threat of death loses its association as being part of the human condition (Kite & Johnson, 1988). This gerontophobia superficially isolates younger people from the problems associated with growing older while they continue to enjoy a seemingly never-ending prosperity of good health and beauty (Nelson, 2002).

In addition to terror management theory, some researchers have suggested ageism is the result of entrenched cultural values and beliefs that are prevalent during children's social development. It is important to note that age is one of the very first factors noticed by other people, and children are particularly cognizant of the different attributes associated with varying age groups (Kite, 1991; Lewis & Brooks-Gunn, 1979). From a very early age, children begin to classify and categorize people into different groups based on their age-related physical characteristics such as an individual's height, face, and voice (For a review, see Montepare & Zebrowitz, 2002). Research indicates that humans are predisposed to categorizing people into groups because it provides a mental heuristic when cognitive resources may be taxed; however, the categorization of groups is one of the premier agents for stereotype acquisition and often hinders the integration of new information concerning the stereotyped targets (Taylor, Peplau, & Sears, 2000).

Concerning their beliefs, it appears children that are only three years old begin to associate the aging process with a continual decline in physical attractiveness. More specifically, children believe that elderly adults are physically less attractive because they are bald, wrinkly, hard-of-hearing, have poor vision, and are generally unhealthy (Hickey, Hickey, & Kalish, 1968; Marcoen, 1979; Seefeldt, Jantz, Galper, & Serock, 1977). Some research suggests that children's association of age with decreased attractiveness contributes to a negative halo effect in which those who are perceived to be unattractive are also expected to possess negative traits and abilities (Langlois et al., 2000). As a result, children treat older adults very different from other age groups once they believe that the elderly are all the same and the shared traits between them are almost entirely negative. One study found that children are significantly less likely to sit close to, make eye contact with, ask for assistance from, or verbally engage an older adult when compared to their interactions with younger individuals (Isaacs & Bearison, 1986). These studies suggest that children, even as young as three years of age, actively discriminate against the elderly by often behaving more negatively than they do towards more proximal age groups (Page, Olivas, Driver, & Driver, 1981).

Given the overwhelming evidence of the prevalence of age discrimination it is rather surprising that most people perceive ageism as less serious than other forms of discrimination including race or gender. In fact, it appears the effects of racism are diminishing faster than those of ageism (Palmore, 2005). In general, the response to ageism has been anemic; federal laws, media outlets, hospitals, employers, and families continue to actively engage in explicit discriminatory practices against the elderly in a society that is continually moving towards political correctness and acceptance. It is no

longer socially acceptable to espouse racist beliefs in a public forum; however, ageism infiltrates all sectors of society and it is tolerated. Unfortunately, there is not a single study in the known extant literature that attempts to compare explicit ageism to racism to determine if age discrimination is indeed socially more acceptable.

As a result, the current study was proposed to further the understanding of ageism, including the possible causes and level of social acceptance. It was hypothesized that individuals would endorse ageist beliefs regardless of the social pressure present in the situation; however, the endorsement of racist beliefs was predicted to drop significantly when the participants were placed in a high pressure social situation. In addition, it was hypothesized that participant on measures of anxiety about the aging process would positively correlate with scores on measures of ageism. In other words, individuals that are anxious about aging were expected to stereotype older adults more than those not anxious about aging. Finally, it was expected that individuals with realistic expectations and are knowledgeable about the process of aging are less likely to engage in ageism. More specifically, it was expected that a negative correlation would be found between measures of ageism and a measure of facts about aging.

## CHAPTER II

### REVIEW OF LITERATURE

There are approximately 37 million people over the age of 65 living in the United States, accounting for 12 percent of the total population. This number is expected to grow exponentially as the Baby Boomers (those born between 1946 and 1964) are likely to experience unprecedented longevity. At the current growth rate, it is projected that the number of elderly individuals living in the United States will double, representing 20 percent of the total population, by the year 2030 (Federal Interagency Forum on Aging-Related Statistics, 2008). This dramatic change in the demographic landscape presents a number of novel challenges for today's society. Unfortunately, these changes also bring the possibility of a new form of prejudice and discrimination that must be addressed.

Ageism is the systematic stereotyping and discrimination against individuals based on their age (Butler, 1987). Although the term ageism can refer to the stereotyping of younger individuals, it is most commonly associated with negative attitudes and behaviors toward the elderly. In comparison to other stereotypes, age discrimination remains largely overlooked by society because people have only recently lived well into old age. From 1900 to 2004, life expectancy at birth increased from 46 to 75 years and 48 to 80 years for men and women, respectively (National Center for Health Statistics, 2007). Historically, older people provided knowledge by serving in the role of cultural transmitters and were shown deference by the members of their community (Simmons, 1945). However, extraordinary advancements in age have resulted in a greater percentage of adults experiencing cognitive and physical decline, which has led to the perception that they are a burden to their families and community. Furthermore, the

cultural shift from agrarian economies, where older men had traditionally owned the land, to industrialized economies has also reduced the authority of older persons in the home (Butler et al., 2006). Although the novelty of old age partially explains the prevalence of ageism, there remain multiple promising theories that propose alternative reasons for why it continues to plague older adults. The following pages will review these theories in great detail as well as highlighting some of the most common forms of age discrimination found in today's society. Theories emphasizing *implicit ageism* have not been included in this review as they are beyond the scope of the present study (For a review, see Levy & Banaji, 2002).

### *Terror Management Theory*

Unlike other forms of ethnic prejudice, ageism is unique in that it is the only out-group that is permeable to other groups. In other words, individuals that belong to the in-group (the young) will eventually become members of the out-group (the old) if they are fortunate to live long enough. Another unique characteristic concerning the study of ageism is that the out-group was once a member of the non-elderly in-group. In general, this distinctive relationship between the young and the old differentiates ageism from other forms of prejudice and discrimination including gender, race, and/or religion (Greenberg, Schimel, & Martens, 2002). With the exception of atypical circumstances, there is no mobility between any of the aforementioned groups that have typically been the targets of multicultural research and the resulting public awareness. Further complicating matters is that much of the research conducted on these other stereotypes appears to not be applicable to the study of ageism. For example, the elderly do not pose an economic or employment threat to younger individuals and older adults do not

generally claim to be superior to other groups, which has been shown to increase hostility and prejudice (Greenberg et al., 1990).

Terror management theory hypothesizes that there is another important feature that serves as a catalyst for ageism. Terror management theory suggests the elderly represent the threat of diminished beauty and declining health that reminds the young of their mortality and the certainty of their eventual death (Cicirelli, 2002; Greenberg, Pyszczynski, & Solomon, 1986; Solomon, Greenberg, & Pyszczynski, 1991). The inevitability of death due to natural causes that are impervious to human intervention results in a society that is psychologically burdened (Langer, 1982). The mere presence of the elderly generates a sense of vulnerability and anxiety among the young as the old constantly reminds them that their mortality and fate are beyond their control. The concept of striving to survive while knowing that death is the only certainty in life presents an existential paradox that has the potential to paralyze the young with terror (Becker, 1973).

The anxiety that arises from the threat of death acts as a motivating force in which the young attempt to return to a state of emotional homeostasis. Some studies have indicated that mortality salience increases positive reactions to those who validate one's worldview and negative reactions to those who challenge or violate an individual's beliefs or their status quo (Goldenberg, Pyszczynski, Greenberg, & Solomon, 2000). Aside from physical distancing from the elderly, researchers have found that younger individuals will sometimes reduce their anxiety by exaggerating the differences between themselves and older populations. More specifically, the threat of death results in younger individuals believing that the elderly have an entirely different set of attitudes,

interests, and personality characteristics (Greenberg et al., 2000). This gerontophobia superficially isolates younger people from the problems associated with growing older (Nelson, 2002). This theory has also been supported by research suggesting anxiety about aging is positively correlated with the endorsement of beliefs about the elderly consistent with ageism (Schwiebert, 1978). In addition, the young often attempt to minimize the threat of death by de-individualizing and derogating older populations. The young begin to refer to older adults with disparaging terms while also categorizing them into differing factions so that the differences between the age groups are magnified and the threat of death loses its association as being part of the human condition (Kite & Johnson, 1988). Instead, death appears to be something only older populations that are “very different” have to experience while the young continue to enjoy a seemingly never-ending prosperity of good health and beauty.

### *Social-Developmental Perspective*

In addition to the terror management theory, some researchers have suggested ageism is the result of entrenched cultural values and beliefs that are prevalent during children’s social development. From a very early age, children are frequently exposed to a variety of negative portrayals of older adults. One children’s book author, Cynthia Rylant, writes a popular series in which the elderly main character is afflicted with loneliness and “had not been cute and peppy for a very long time” (1994, p. 14). Another children’s book indicates the elderly characters have to rest on a big dog when they get tired of walking after spending all day in their rocking chairs on their porch (Rylant, 2006). Even the classic children’s book, *Charlie and the Chocolate Factory* (Dahl, 1964), is riddled with ageist descriptions and ideas including the notion that the wishes

and desires of the old are largely irrelevant. For example, Charlie's grandfather, who was so frail that he had not left his bed for the entire story, leaps up upon learning that Charlie wins the golden ticket implying that his impairment is a choice or the result of laziness. It is important to note that age is one of the very first factors noticed by other people and children are particularly cognizant of the different attributes associated with varying age groups (Kite, 1991; Lewis & Brooks-Gunn, 1979). From a very early age, children begin to classify and categorize people into different groups based on their age-related physical characteristics. Research indicates that humans are predisposed to categorizing people into groups because it provides a mental heuristic when cognitive resources may be taxed; however, the categorization of groups is one of the premier agents for stereotype acquisition and often hinders the integration of new information concerning the stereotyped targets (Taylor, Peplau, & Sears, 2000). Some of the most common physical characteristics used by children while categorizing people into different age groups include an individual's height, face, and voice (For a review, see Montepare & Zebrowitz, 2002). The broad range of visual cues used by children to assess someone's age suggests that age is a particularly salient construct in a child's taxonomy of other human beings that is utilized early in development. The fact that very young children can differentiate between diverse age groups has led researchers to focus on whether children develop any additional thoughts or feelings about these other groups. In relation to ageism, the research has focused on children's beliefs (stereotypes), values (prejudice), and behavior (discrimination) towards older adults.

Concerning their beliefs, it appears children that are only three years old begin to correlate the aging process with a continual decline in physical attractiveness. More

specifically, children believe that elderly adults are physically less attractive because they are bald, wrinkly, hard-of-hearing, have poor vision, and are generally unhealthy (Hickey, Hickey, & Kalish, 1968; Marcoen, 1979; Seefeldt, Jantz, Galper, & Serock, 1977). Some research suggests that children's association of age with decreased attractiveness contributes to a negative halo effect in which those who are perceived to be unattractive are also expected to possess negative traits and abilities (Langlois et al., 2000). Socially, children stereotype older adults as being lonelier, more depressed, and less interesting and engaging than younger individuals. Much like the research using adults, children also stereotype elderly individuals as having positive personality characteristics including kindness, friendliness, and wisdom (Fillmer, 1982; Ivester & King, 1977; Kite & Johnson, 1988; Marks, Newman, & Onawola, 1985). Children are also fearful of growing old and becoming ill before eventually dying, suggesting terror management is prevalent long before adulthood (Seefeldt et al., 1977).

Consistent with the research focusing on alternative forms of prejudice and stereotyping, children assign a value, or develop an attitude, towards older adults once they believe that all of the members of their group share common characteristics. The research on attitude development indicates that certain aspects of stereotyped people's appearance contribute to the perceiver's affective reactions as well as to the traits and abilities they expect people to possess (Zebrowitz, 1996). One meta-analysis found that children, on average, have a negative perception of elderly individuals and therefore favor younger adults much more than older adults (Kite & Johnson, 1988). In addition to their thoughts and perceptions, children also have negative feelings towards older adults. This negative affect towards the elderly has been shown in children as young as four

years of age and appears to remain ingrained and often increases if it is not addressed before early adolescence (Hickey & Kalish, 1968; Klein, Council, & McGuire, 2005; Kogan, Stephens, & Shelton, 1961).

Children treat older adults very different from other age groups once they believe that the elderly are all the same and the shared traits between them are almost entirely negative. Much like their attitudes towards the elderly, children prefer to interact and spend time with younger people. When presented with a series of hypothetical activities, children will almost always select a younger person to be their partner (Miller, Blalock, & Ginsberg, 1985). Even when children are asked to imagine a scenario where they would have to interact with the elderly, the activities typically focus on the children having to provide care for the older adults (Seefeldt et al., 1977). One study found that children are significantly less likely to sit close to, make eye contact with, ask for assistance from, or verbally engage an older adult when compared to their interactions with younger individuals (Isaacs & Bearison, 1986). These studies suggest that children, even as young as three years of age, actively discriminate against the elderly by often behaving more negatively than they do towards more proximal age groups (Page, Olivas, Driver, & Driver, 1981).

### *Communication*

A person's ability to communicate effectively and efficiently is arguably the most important adaptive skill for survival. Even infants display certain innate and rudimentary forms of communication including the mimicking of facial expressions made by adults in order to form an emotional attachment (Meltzoff & Moore, 1977). Unfortunately, a number of studies have illustrated how the integrity of communication with older adults

is jeopardized by the presence of ageism.

Communication accommodation theory posits that the speaker's stereotypical beliefs about the audience govern how the message is delivered (Coupland, Coupland, Giles, & Henwood, 1988). Some of these studies have shown how younger adults will often change their behavior when communicating with older adults. For example, baby talk is often used by younger populations when communicating with elderly adults. Baby talk is evident when younger individuals use a higher pitch and feminine sounding voice when speaking to an older adult to where even third-party listeners can identify the approximate age of the audience when only listening to the speaker (Montepare, Steinberg, & Rosenberg, 1992). This style of speech is more likely to be utilized when speaking to despondent targets (depressed and sad) rather than "golden agers" (active, sociable, and well informed), particularly in a hospital setting (Hummert, Shaner, Garstka, & Henry, 1998). Not surprisingly, this patronizing style of speech is increasingly prevalent in speakers that believe the negative stereotypes about their audience are true (Thimm, Rademacher, & Langer, 1998).

In addition to the noticeable phonological differences, younger populations will often change the actual message that is delivered when communicating with elderly adults. Younger individuals are less likely to discuss personal issues and are often less sincere with elderly adults (Montepare et al., 1992). This has the potential to lead to older populations feeling isolated from younger individuals, including their family, because they are not allowed to participate in some of the most important events. Younger speakers will also deny older adults the ability to contribute to complex discussions by actively avoiding any topics or questions that may be considered

challenging (Rodin & Langer, 1980). Unfortunately, this form of communicative discrimination can result in the exclusion of older populations in societal discussions that concern their future and well-being.

### *Ageism in the Media*

Mass media is an integral component in the dissemination of messages to a society. The media shares a collaborative relationship with the audience by reflecting the values and customs of the community while simultaneously creating and dispensing new messages. It often informs people about how to live, self-appraise, and perceive others (Butler et al., 2006). Obviously, the explicit or implicit bias that is espoused by any media sources will have an impact on the audience receiving the message. Television is one of the most powerful and influential forms of media because viewers watch and develop frameworks about older populations based on the television portrayal and they observe how these aggregate themes cut across all programming (Signorielli, 2004). The average American watches 4 hours and 39 minutes of television every day so any stereotypes or prejudice portrayed on the screen is likely to manipulate the perceptions of the viewers (Freierman, 2006). This is evidenced by studies linking exposure to more television and the belief that stereotypical portrayals of the elderly are accurate (Donlon, Ashman, & Levy, 2005). With regards to ageism, the media is one of the foremost culprits in perpetuating stereotypical views of the elderly while also discriminating against them in a variety of unique ways.

One of the most readily identifiable sources for stereotypes of the elderly can be found in advertisements. Advertisements, particularly from the, “silver industries”, send constant reminders that normal changes associated with aging can and should be avoided.

They constantly put forward the idea that wrinkles, the loss of hair, and sagging skin are unattractive and unacceptable. It is not surprising that four of the top five nonsurgical cosmetic procedures in 2003 addressed the visible signs of aging as this industry continues to redefine what aging should look like for a new generation. From 1997 to 2003, Botox injections enjoyed a 3,387% increase in use (Bayer, 2005). There is even a bias in those delivering these messages as evidenced by the lack of models over the age of 40 being used for anything other than anti-aging products (Bayer, 2005). This problem goes beyond physical stereotyping to also include the infantization of elderly adults in advertisements. Older people will often be dressed in childlike clothing and are portrayed as having personality characteristics congruent with those of children (Arluke & Levin, 1984). The rampant ageism found in advertisements is particularly problematic because Americans are exposed to approximately 100 television advertisements and an additional 100 to 300 ads through other media outlets every day (Pratkanis & Aronson, 2002).

The stereotyping of elderly adults continues to be found throughout media portrayals outside of advertisements. While the majority of characters on television are cast in a positive light, only 40% of elderly males and even fewer females are presented as happy, successful, and good (Aronoff, 1974). In addition, the young and middle-age characters hold the most prestigious jobs while the elderly are relegated to working in blue-collar jobs (Signorielli, 2004). The elderly are often portrayed as mentally incompetent or physically disabled for the purposes of comic relief (Zebrowitz & Montepare, 2000). One study provided additional evidence by noting older people are often presented by various media outlets as slow, less intelligent, decrepit, sick, sexless,

ugly, and senile (Carmichael, 1976).

In addition to stereotyping, the media also actively discriminates against the elderly by largely ignoring both the overall size of the population and their needs. Individuals over the age of 65 comprise 12.7% of the total population in the United States; however, only 1.9% of prime-time television characters are approximately this age or older (Gerbner & Ozyegin, 1997; Signorielli, 2004). Studies that have looked at all hours have found that the elderly are still underrepresented, accounting for only 1.5% of all the characters found on television (Zebrowitz & Montepare, 2000). Further complicating matters is the way the media represents elderly races in addition to older men and women. In general, all other races are equally, if not overly, represented on television with the one exception of elderly minorities (Signorielli, 2001). Elderly women are more susceptible to media bias because their characters display stereotypic signs of aging earlier than their male counterparts and elderly women only account for 25% of all older characters (Gerbner, Gross, Signorielli, & Morgan, 1980; Signorielli, 2001). This is clearly inaccurate as there are more elderly women than men in the population and their lack of representation in the media may lead women to believe their usefulness declines with time (Gerbner et al., 1980). In addition to television, the last 15 years has seen newspapers working hard to broaden their topics to include a more diverse population by focusing on ethnic, racial, gender, and religious issues (Krueger, 2001). However, the elderly are missing from this puzzle and it is estimated that only 50 newspapers around the entire country have a reporter dedicated to examining the issues of older adults (Schoonmaker, 2001).

## *Ageism in Health Care*

By the year 2020, it is estimated that the baby boomer generation will consume over half of the health care services in the United States (Hodes, 1997). With the rate of life expectancy continuing to increase to unprecedented levels it will become essential that elderly adults receive fair treatment by both the medical and mental health communities as they continue to age. It appears, however, that explicit forms of institutional ageism are widespread and the elderly are likely to be burdened with inequitable access to certain treatments and procedures while also experiencing a lower quality of the services delivered.

With regards to physical health care, medical professionals will often explicitly discriminate against the elderly in a variety of ways. Many of the presenting symptoms shared by the elderly are attributed to the natural aging process and further diagnostic possibilities are subsequently overlooked. For example, one study has shown 35% of doctors erroneously consider an increase in blood pressure to simply be the result of normal aging and they do not check for any possible cardiovascular defects (Hajjar, Miller, & Hirth, 2002). Medical doctors will also withhold certain treatments for fear that it is not cost efficient or likely to succeed. The significant underuse of chemotherapy in the treatment of breast cancer for patients over the age of 65 illustrates how doctors erroneously assume certain treatments will be too invasive or have a higher likelihood of failure in older populations (Du, Key, Osborne, Mahnken, & Goodwin, 2003).

Doctors will also engage in discriminatory practices by focusing on symptom management with older populations instead of encouraging proactive healthy living habits and behaviors like they do with younger patients (Rodin & Langer, 1980). It is

estimated that 60% of adults over the age of 65 do not receive recommended preventative services including vaccines for flu and pneumonia or routine checks of blood pressure and cholesterol levels (National Center for Chronic Disease Prevention and Health Promotion, 2004). Even medical disorders that are predominantly found mostly in elderly individuals are often not assessed for using the appropriate tests (National Center for Chronic Disease Prevention and Health Promotion, 2003). In addition to the outright denial of services, many of the studies that have been conducted to support various treatment options have not included older adults in the sample. Many of the clinical trials run by pharmaceutical companies exclude people over the age of 65 from participating even though they are the biggest consumers of prescription drugs (Godlovitch, 2003). Likewise, older patients are underrepresented in clinical trials that examine the effectiveness of cancer treatments for a variety of ailments (Hutchins, Unger, Crowley, Coltman, & Albain, 1999). The lack of elderly adults included in clinical trials, particularly those that target disorders commonly associated with old age, is disconcerting because it raises questions about the generalizability of the findings.

Another area of measurable institutional ageism involves the communicative style and substance of the messages delivered by medical doctors to their older patients. Physicians are less engaged when working with elderly individuals and they are less likely to include the patients in decision making regarding their own health. When the patients are included, the concordance between the physician and the patient on the appropriate course of treatment is significantly lower than the concordance rate observed between physicians and younger patients (Greene, Adelman, Charon, & Friedmann, 1989). Even when discussing their healthcare, physicians will talk about the patient, but

not directly to the patient unless employing the use of baby talk to oversimplify the information so that it is more easily understood (Caporael & Culbertson, 1986). In general, physicians do not want to be troubled with chronic diseases or problems supposedly related to normal aging and will therefore spend less time with older patients than with younger patients (Keeler, Solomon, Beck, Mendenhall, & Kane, 1982).

Discrimination against the elderly is found in abundance throughout the mental health field. It is estimated that 20% of Americans over the age of 65 are emotionally disturbed, but the majority of the resources in mental health care focus primarily on young people (Butler et al., 2006). A study of age bias in a general hospital found that elderly patients were less likely to be referred for psychiatric consultation even though they are at a much greater risk for severe symptomology and maladaptive behaviors, particularly suicide, than the younger individuals that were referred (Hillerbrand & Shaw, 1990; Safer, 1997). In addition, the psychological reports and the clinical interviews conducted with the elderly patients were less comprehensive and the elderly received less severe diagnoses despite identical symptom presentations (Hillerbrand & Shaw, 1990).

The bias and ageism prevalent among health care providers can at least partially be attributed to a lack of training and desire to work with this population. On average, medical students do not receive early and adequate training in gerontology. This lack of training can often lead to frustration among those in training and they are likely to develop negative attitudes and have little desire to work with this important group of individuals (Robinson & Rosher, 2001). Mental health providers also display little interest in working with populations as they increase in age (Hatchett, Holmes, & Ryan, 2002). This general malaise towards the mental health treatment of elderly adults

continues even though social workers readily acknowledge the strong need for gerontological training (Anderson & Wiscott, 2003). Another frequently cited reason for not wanting to work with this population is that Medicare/Medicaid does generally not reimburse psychologists for services rendered, although this is improving. Only 55% of community mental health centers report having specific programs for geriatric populations and only 41% of mental health care providers are trained to provide treatment for the population (Kimmel, 1988).

### *Ageism in the Workplace*

It is expected that a large proportion of adults over the age of 65 will seek employment in the future as they continue to outlive the savings they have set aside for retirement. Labor force projections forecast that the percentage of people in the workplace aged 55 and above will rise from the previously reported 27.1 percent in 1990 to 39.1 percent by 2020 (Williams & Nussbaum, 2001). This inevitable influx of older employees will pose new challenges for employers as they wrestle with issues that are particularly salient to seniors such as appropriate health care options. This unique workforce will also be increasingly subjected to some of the most insidious and egregious discriminatory practices by employers. Although reports of perceived discrimination due to age are increasing for all age groups, workers over the age of 65 are significantly outpacing the remainder of the workforce (Davis, Smith, & Marsden, 2003). Unlike other forms of discrimination in the workplace, employers openly stereotype their older workers and explicitly withhold opportunities that are commonly afforded to younger employees.

Much like the other forms of institutional prejudice, the precursor to

discrimination is the belief that all members of a group are the same. Concerning employment, the majority of these stereotypes concerning older workers result in a negative prejudice. Older workers are perceived as cognitively deficient, physically unsuitable for work, unable to cope with change, poor performers at work, and pining for retirement (McCann & Giles, 2002). Furthermore, older workers' colleagues perceive them to be useless, ugly, and generally unhappy (Palmore, 1988; Palmore, 1990). Older employees are often rated lower on job-related tasks and activities despite the lack of any noticeable relationship between age and job performance (Cleveland & Landy, 1983; Salthouse & Maurer, 1996; Singer, 1986). Regardless, older workers are still perceived to be poorer workers and routinely receive lower supervisory scores when subjective ratings are used over objective measures (Waldman & Avolio, 1986). Most supervisors have been reported to apply internal and stable attribution to their older workers since they are inflexible and "unlikely to change" while younger employees' actions are taken in the context of the environment (Dedrick & Dobbins, 1991; Ferris, Yates, Gilmore, & Rowland, 1985).

Employers' hiring practices represent the first, and perhaps most damaging, forms of discrimination faced by older workers as it restricts their opportunities for obtaining employment (Hirsch, Macpherson, & Hardy, 2000). Research in this area indicates that the unfair treatment of older workers begins as early as the application and interviewing process. Interviewers rate younger applicants higher than older applicants even if they have been matched in appearance, demeanor, and qualifications (Avolio & Barrett, 1987; Bendick, Brown, & Wall, 1999). In addition, younger workers were favored during the hiring process over older workers in terms of salary, full-time versus part-time status, and

health benefits (Bendick et al., 1999).

If an older worker is fortunate enough to obtain employment they are still likely to experience discrimination from their coworkers and employers on the job. They are frequently the targets of jokes and often exposed to ageist attitudes and beliefs (McCann & Giles, 2002). Older workers are considered difficult to train and are often overlooked or neglected for promotions (Cleveland & Shore, 1992; Maurer & Rafuse, 2001). In addition, older employees receive more severe recommendations for poor performance than do their younger counterparts (Rupp, Vodanovich, & Crede, 2006). This is contrasted by some research suggesting that younger employees are more likely to receive a recommendation for formal assistance to remedy performance problems (Rupp et al., 2006).

Many companies used to have mandatory retirement laws that directly discriminated against older workers because of their age; however, the law has since changed so that age-differentiated behavior by an employer against anyone 40 or older is illegal (Clark, Burkhauser, Quinn, Moon, & Smeeding, 2004). Unfortunately, the passage of this law has done little to deter the prevalence of ageism in the workplace (Butler et al., 2006). Of the nearly 17,000 age-bias complaints filed with the Equal Employment Opportunity Commission (EEOC), only 1.2 percent were resolved with successful conciliations while 90 percent of the age discrimination suits never made it to trial (McCann, 2003). Also, certain loopholes in the law allow some professions to be excluded from the prohibition against mandatory retirement. Tenured executives, law enforcement officers, firefighters, air traffic controllers, and foreign service personnel are still subject to mandatory retirement despite there being no evidence that they pose a

health risk to the community as a result of their advanced age (Butler et al., 2006).

Companies often portray retirement as a positive thing, providing older employees with some small rewards for their years of services while reducing competition for the younger workers (Jefferys, 1996). In times of financial hardship many companies will minimize losses by firing their older workers first or forcing them into early retirement (Plattman & Tinker, 1998). The forcing of workers out of their place of employment is a form of explicit age discrimination that perpetuates the idea older workers are not as valued as younger workers and are ultimately expendable.

### *Elder Abuse*

The abuse of the elderly by caregivers in their homes and institutions continues to be one of the most widespread and contemptible acts directed at an individual based solely on their group membership. Approximately 1 to 3 million Americans over the age of 65 have been subjected to injury, exploitation, or other forms of mistreatment by someone who they rely on for their care (Pillemer & Finkelhor, 1988). A more recent estimate indicates that the rate of abuse may be five times higher than previous estimates because many cases are never reported to the authorities (American Psychological Association, 2005). This is most likely because the vast majority of elder abusers are caregivers upon which the elderly are totally dependent (Butler et al., 2006).

There are many different forms of abuse perpetrated against the elderly including: physical, financial, emotional, and sexual abuse. These abusive actions are certainly the most noticeable, but neglect and abandonment are arguably the most prolific and hardest to detect (Butler et al., 2006; Woolf, 1998). Very little research has been conducted looking at how ageism contributes to these ongoing abuses experienced by older adults;

however, the federal government's lack of response to this issue illustrates the seemingly tacit acceptance of ageism.

Despite the frequency of elder abuse, victims have very little resources at their disposal to combat or impede the problem. The National Institute on Aging (NIA) dedicates only \$1.7 million out of their \$1 billion budget and there is little requirement for this money to be used to physically protect elderly adults (U.S. Department of Health and Human Services, 2005). The majority of domestic violence shelters will not serve older persons and existing programs designed to address elder abuse are not as comprehensive as those seen for child abuse and domestic violence (Commission on Legal Problems of the Elderly, American Bar Association, 2002; Wolf, 1999). Unlike other forms of abuse, including child and domestic, there are no federal laws that target elder abuse. Likewise, there are no federal departments or employees designed to address or investigate elder abuse like those found for child abuse and domestic violence (Butler et al., 2006). This apathetic institutional response to elder abuse conveys the message that the plight of older adults is not important.

Fortunately, the provisions in place to protect against elder abuse are better at the state level. Every state has legislation for reporting elder abuse and most states have criminal penalties associated with the various types of abuse (National Center on Elder Abuse, 2005). Additionally, most states mandate that all incidents of elder abuse be reported to the proper authorities. Although this is a step in the right direction there remains much that needs to be done to help minimize the prevalence of elder abuse. Currently, there is no consistency in the laws between each of the states and there are very few available training programs for social services, law enforcement, or legal

personnel (Butler et al., 2006). The lack of leadership coming from the federal government has essentially created disparate interpretations on how to define elder abuse and punish the perpetrators. This also sends the message that the abuse of the elderly is not as serious as the abuse of a child or a spouse.

### *Ageism and Racism*

There is a staggering amount of evidence that age discrimination exists and affects the lives of older adults every day. Regardless, most people perceive ageism as less serious than other forms of discrimination including race or gender. In fact, it appears the effects of racism are diminishing faster than those of ageism (Palmore, 2005). This is partially explained by the institutional indifference to the plight of older adults. Even the Civil Rights Act of 1964 does not prohibit employment discrimination based on age like it does for race, gender, national origin, and religion (Butler et al., 2006). In general, the response to ageism has been anemic; federal laws, media outlets, hospitals, employers, and families continue to actively engage in explicit discriminatory practices against the elderly in a society that is continually moving towards political correctness and acceptance. It is no longer socially acceptable to espouse racist beliefs in a public forum; however, ageism infiltrates all sectors of society and it is tolerated.

There are many possible explanations for why ageism is so uniquely ignored in the United States while other forms of discrimination are admonished. As mentioned previously, this is the first time in human history that people have lived long enough to be perceived as a “burden” on society. Likewise, many of the stereotypes regarding older adults (e.g. feeble-mindedness, wrinkly, slow) have only recently come into the national consciousness since the majority of the population did not live long enough to experience

these problems a mere century ago. Finally, the intergroup mobility inherent in aging leads members of society to believe that they are simply interacting with their future selves. Unfortunately, there is not a single study in the known extant literature that attempts to compare explicit ageism to racism to determine if age discrimination is indeed socially more acceptable.

### Hypotheses

The purpose of this proposed study was to further understanding of ageism, including possible causes and social acceptance. The Specific Aims of the proposed research were to:

**1: Explore the social acceptance of ageism compared to that of racism.**

*Hypothesis 1:* It was hypothesized that younger individuals would endorse ageist beliefs regardless of the social pressure present in the situation; however, the endorsement of racist beliefs was predicted to drop significantly when the participants were placed in a high pressure social situation.

**2: Determine if terror management theory helps explain the endorsement of ageist beliefs.**

*Hypothesis 1:* Analyses were expected to indicate that participant scores on measures of anxiety about the aging process would positively correlate with scores on measures of ageism. In other words, individuals that are anxious about aging were expected to stereotype older adults more than those not anxious about aging.

**3: Test to see if accurate knowledge about aging influences the presence of ageism.**

*Hypothesis 1:* Individuals that have realistic expectations and are knowledgeable about the process of aging were hypothesized to be less likely to engage in ageism. More

specifically, it was expected that a negative correlation would be found between measures of ageism and a measure of facts about aging.

CHAPTER III  
METHODOLOGY

Participants

Two samples (Sample A,  $N = 206$ ); Sample B,  $N = 208$ ) of undergraduate students enrolled in an introductory psychology course at a large Southern public university were used for this study; Sample A completed measures of ageism and Sample B completed measures of racism. The participants were all recruited using the University's on-line experiment management system, described in greater detail below. The ages of the participants included in sample A ranged from 18 to 28 years, and the mean age was 19.7 years. Sample A was comprised mostly of females (57%) and Caucasians (76%). The ages of the participants included in sample B ranged from 18 to 28 years, and the mean age was 19.6 years. Sample B was comprised mostly of females (55%) and Caucasians (90%).

Table 1.

*Means, Standard Deviations, and Range for Demographic Variables*

	Sample A (Ageism)		Sample B (Racism)		Total
	<u>On-line</u>	<u>Lab</u>	<u>On-line</u>	<u>Lab</u>	
<i>n</i>	111	95	111	97	414
Age					
Mean and S.D.	19.5 ± 1.8	19.8 ± 1.7	19.4 ± 1.1	19.9 ± 1.5	19.6 ± 1.6
Range	18-27	18-28	18-23	18-28	18-28
Gender ( <i>n</i> )					
Male	42	46	45	49	182
Female	69	49	66	48	232
Education ( <i>n</i> )					
High School	0	0	1	0	1
Graduate	4	0	6	0	10
Some College	107	94	102	96	399
College Graduate	0	1	2	1	4
Ethnicity ( <i>n</i> )					
Caucasian	92	65	102	86	345
African American	4	14	0	0	18
Hispanic	3	2	2	2	9
Asian American	2	2	1	2	7
Native American	9	7	3	4	23
Biracial	1	5	3	3	12
SES ( <i>n</i> )					
Low	6	3	3	1	13
Middle-low	14	11	11	10	46
Middle	47	41	49	47	184
Middle-upper	39	35	42	37	153
Upper	5	4	3	2	14

All participants received a consent notice that assured their information and responses were kept confidential and it stated they could choose to not answer any questions and/or withdraw from the study at any time. At the end of the study, participants received credit for their course as the method of compensation. All participants and their data were treated in accordance with the “Ethical Principles of Psychologists and Code of Conduct” (American Psychiatric Association, 2002) and this study was approved by the Institutional Review Board (Appendix A).

Sample A completed a demographics page (e.g. age, gender, ethnicity, socioeconomic status, years of education), the Anxiety about Aging Scale (AAS; Lasher & Faulkender, 1993), Fraboni Scale of Ageism (FSA; Fraboni, Saltstone, & Hughes, 1990), Attitudes Toward Old Persons scale (OP; Kogan, 1961), Facts on Aging Quiz 1 (FAQ1; Palmore, 1977) and the Marlowe-Crowne Social Desirability Scale (M-C SDS; Crowne & Marlowe, 1960). In addition, the participants were asked questions about their subjective level of experience with older adults including: previous exposure, current level of exposure, and if they have ever provided care for an older adult. Each measure is presented in Appendix B.

Sample B completed the same demographics page, the Attitudes Toward Blacks (ATB; Brigham, 1993), Modern Racism Scale (MRS; McConahay, 1983), Anti-Black Scale (ABS; Katz & Hass, 1988), and the Marlowe-Crowne Social Desirability Scale (M-C SDS; Crowne & Marlowe, 1960). In addition, the participants were asked questions about their subjective level of experience with Black individuals including: previous exposure, current level of exposure, and if they are knowledgeable about African American cultural customs and values. Each measure is presented in Appendix C.

## Measures

### *Anxiety about Aging Scale (AAS)*

The Anxiety about Aging Scale (AAS; Lasher & Faulkender, 1993) consists of 20 items that assess participants' overall anxiety about aging. Participants responded to the items using a Likert-type scale ranging from -4 (*strongly disagree*) to +4 (*strongly agree*) with higher scores representing greater levels of anxiety. The individual item responses were summed and had a possible range from -80 to +80. In prior research, the AAS has been shown to be negatively correlated with attitudinal measures of ageism as well as overall knowledge about the aging process (Lasher & Faulkender, 1993). In the present study, the measure achieved a high internal consistency with a Cronbach's alpha coefficient of .83.

### *Fraboni Scale of Ageism (FSA)*

The Fraboni Scale of Ageism (FSA; Fraboni et al., 1990) originally consisted of 29 items designed to assess both cognitive and affective components of ageism; however, a recent analysis has found stronger factor loadings and the measure has since been revised to 23 items (Rupp, Vondanovich, & Crede, 2005). The revised FSA is one of the most widely used measures of ageism and is comprised of three factors: stereotypes, separation, and affective attitude (Rupp et al., 2005). Participants responded to the items using a Likert-type scale ranging from -4 (*strongly disagree*) to +4 (*strongly agree*) with higher scores indicating greater ageism endorsement. The individual item responses were summed and had a possible range from -92 to +92. The FSA had high internal-consistency reliability with a Cronbach's alpha coefficient of .89 in the current study.

### *Attitudes Toward Old Persons scale (OP)*

The Attitudes Toward Old Persons scale (OP; Kogan, 1961) measures individuals' attitudes toward elderly adults. Convergent validity has been established showing that the OP correlates significantly with other measures of discrimination and stereotyping of groups (Kogan, 1961). The scale originally consisted of 34 items: 17 positive and 17 negative statements about old people in which participants would record their level of agreement using a Likert-type scale ranging from -4 (*strongly disagree*) to +4 (*strongly agree*). The individual item responses on the OP were summed and had a possible range from -68 to +68. Kogan found the OP- (negative statements) to have much greater reliability than the OP+ scale (positive statements). In addition, the current study is only interested in looking at negative stereotypes of older adults. Therefore only the 17 item OP- scale was utilized and the results indicated high reliability with an alpha of .92.

### *Facts on Aging Quiz (FAQ1)*

A multiple-choice version of Palmore's (1977) Facts on Aging Quiz (FAQ1) was used to measure participants' overall knowledge of aging (Harris, Changas, & Palmore, 1996). Convergent validity has been found by studies indicating that the FAQ1 is a good predictor of knowledge about the aging process (Matthews, Tindale, & Norris, 1984). The multiple-choice version was selected over the original True/False version of the FAQ1 because it has been found to yield less measurement error for participants with an above average knowledge of aging and the sample used in the current study has had some exposure to the aging process in their introductory psychology courses (Harris et al., 1996). Each of the 25 multiple-choice questions asks about general aging processes and

has 4 possible options with only one correct answer. Each of the correct answers will be summed with a possible range from 0 to 25. The multiple-choice FAQ1 forfeited some overall internal consistency with an alpha reliability estimate of .20 versus the alpha of .28 observed in the original measure; however, this is not really a concern since there is only one correct answer and participants that do not know the answer likely make different guesses each time they take the measure (with resultant lower internal consistency). Although the reliability estimate is lower, the multiple-choice version of the FAQ1 also provides a more sensitive indirect measure of age bias than the True/False version as it provides a greater number of options for each question (Harris et al., 1996).

#### *Attitudes Toward Blacks (ATB)*

The Attitudes Toward Blacks (ATB; Brigham, 1993) is a measure of racial attitudes toward Blacks with higher scores representing a greater level of prejudice. The ATB has also been shown to be significantly correlated with multiple other widely used measures of racism and prejudice against Blacks (Brigham, 1993). The ATB consists of 20 items in which the participants responded on a Likert-type scale ranging from -4 (*strongly disagree*) to +4 (*strongly agree*). Individual item responses were and the ATB had a possible range from -80 to +80. A factor analysis conducted on the ATB reveals 4 factors: social distance, affective reactions, governmental policy, and worry about reverse discrimination (Brigham, 1993). The results from the current study revealed the ATB to have high internal consistency with a Cronbach's alpha coefficient of .91.

#### *Modern Racism Scale (MRS)*

The 7-item Modern Racism Scale (MRS; McConahay, 1983) was employed to assess participants' level of prejudice toward Blacks. This measure was designed to be a

non-reactive measure of anti-Black attitudes held by other ethnicities. The MRS has been shown to strongly correlate with other measures of racism as well as discrimination (Dovidio, Kawakami, & Gaertner, 2002). Participants responded to 7 statements about Blacks on a Likert-type scale ranging from -4 (*strongly disagree*) to +4 (*strongly agree*) with higher scores representing greater prejudice toward Blacks. The individual item responses were summed and the MRS had a possible range from -28 to +28. The measure had an adequate level of internal consistency with a Cronbach's alpha coefficient of .79.

#### *Anti-Black Scale (ABS)*

The Anti-Black Scale (ABS; Katz & Hass, 1988) is designed to measure racial attitudes and stereotypes of Blacks. The ABS has been shown to strongly correlate with other measures of racism (Wittenbrink, Judd, & Park, 2001). It is a 10-item measure in which participants indicated their level of agreement with various statements on a Likert-type scale ranging from -4 (*strongly disagree*) to +4 (*strongly agree*) with higher scores representing a stronger endorsement of the stereotypical view of Blacks. The individual item responses were summed and the ABS had a possible range from -40 to +40. The internal consistency coefficient for the measure was high in the present study, with a Cronbach's alpha of .89.

#### *Marlowe-Crowne Social Desirability Scale (M-C SDS)*

The Marlowe-Crowne Social Desirability Scale (M-C SDS; Crowne & Marlowe, 1960) is a measure of social desirability widely used to determine the influence of non-test-relevant participant response bias. The measure has been shown to have a strong correlation with the Minnesota Multiphasic Personality Inventory (MMPI) indices for

test-taking bias (MMPI scale *K*), response bias (MMPI scale *L*), and validity (MMPI scale *F*; Crowne & Marlowe, 1960). In this study, it was included to determine whether participants were forthright with their answers or trying to answer in a manner that is considered more socially desirable (i.e. less endorsement of stereotypes and prejudice). The M-C SDS consists of 33 items in which the participants indicated whether a statement about them is True or False with higher scores being associated with a more socially desirable presentation. The individual items responses were summed and the M-C SDS had a possible range from 0 to +33. The results from this study indicated that the internal consistency coefficient for the measure is .77.

#### Procedure

Sample A was divided into four groups: the first two groups completed a demographics page, the AAS, FSA, OP, FAQ1, and M-C SDS on-line using different sets of instructions. The participants completed the measures using a secure on-line experiment management system (i.e., Sona). Sona requires all users to have a university-affiliated email address in addition to a current student ID number; students are only allowed to complete and submit the surveys one time. Several studies have empirically validated the “candor hypothesis” which states that computerized web interfaces facilitate self-disclosure among participants by ensuring confidentiality (Davis, 1999). Furthermore, participants report lower levels of social anxiety and social desirability when provided with the ability to answer anonymously on-line (Joinson, 1999). Given these reports in the literature, the two on-line groups completed the questionnaires using different sets of instructions. All the measures for the groups were randomly ordered before distribution. The low social pressure condition received the following instructions:

Relationships with elderly adults are a very complex issue, and people vary widely in their opinions. People have many reasons for their views, including their own personal histories and experiences. Because everyone's experiences are unique, it is important to realize that each individual's perspectives should be respected. Your opinions are valuable to us as they are. We ask that you express your own attitudes and opinions as honestly as possible, even if they are not "politically correct".

The high social pressure completed the same packet with the aforementioned measures on-line, but received slightly altered instructions to increase social pressure (Payne, Burkley, & Stokes, 2008). The instructions were as follows:

Relationships with elderly adults are a very important issue, because prejudice and discrimination continue to exist, sometimes in subtle ways. One way that people can overcome the scourge of prejudice is by continually being vigilant for biased tendencies in their own attitudes, opinions, and behavior. Your opinions are important to us. We ask that you express your own attitudes and opinions, keeping in mind the possibility that we are all vulnerable to biases against the elderly.

The remaining two groups came into the lab and received a packet with the aforementioned measures as well as both sets of instructions.

Sample B was divided into four groups: two groups completed a demographics page, the ATB, MRS, ABS, and M-C SDS on-line using both sets of instructions. The remaining two groups came into the lab and received a packet with the same measures as well as both sets of instructions to either increase or decrease social pressure and reflect

racial relations instead of relationships with elderly adults (Payne et al., 2008). As with Sample A, all measures were randomly ordered before distribution. Table 2 provides a visual summary of the conditions and associated measures.

Table 2.

*Summary of Conditions and Associated Measures*

	Sample							
	A (on-line)		A (lab)		B (on-line)		B (lab)	
	Pressure		Pressure		Pressure		Pressure	
	High	Low	High	Low	High	Low	High	Low
Consent	X	X	X	X	X	X	X	X
Demographics	X	X	X	X	X	X	X	X
AAS (anxiety about aging)	X	X	X	X				
FSA (scale of ageism)	X	X	X	X				
OP (attitudes re: old persons)	X	X	X	X				
FAQ1 (facts on aging)	X	X	X	X				
M-C SDS (social desirability)	X	X	X	X	X	X	X	X
ATB (attitudes re: Blacks)					X	X	X	X
MRS (modern racism scale)					X	X	X	X
ABS (anti-Black scale)					X	X	X	X

## CHAPTER IV

### FINDINGS

#### *Sample Characteristics*

##### *Sample A (Ageism)*

No significant differences were found between the presence of men and women in the on-line and lab conditions,  $\chi^2 = 2.34, p = .13$ . Likewise, no significant differences were found between the on-line and lab conditions when examining socioeconomic status,  $\chi^2 = .69, p = .95$ , or education,  $\chi^2 = 4.63, p = .10$ . However, significant differences were found between the on-line and lab conditions when examining ethnicity,  $\chi^2 = 12.15, p < .05$ . Finally, no significant differences were observed when looking at age between the on-line and lab conditions,  $F(1, 198) = 4.92, p = .21$ .

##### *Sample B (Racism)*

No significant differences were found between the presence of men and women in the on-line and lab conditions,  $\chi^2 = 2.08, p = .15$ . Likewise, no significant differences were found between the on-line and lab conditions when examining socioeconomic status,  $\chi^2 = 1.02, p = .91$ , education,  $\chi^2 = 6.60, p = .09$ , or ethnicity,  $\chi^2 = .90, p = .93$ . Finally, significant differences were observed when looking at age between the on-line and lab conditions,  $F(1, 202) = 9.19, p < .05$ .

#### *Instructions*

To see if the instructions were having an effect, analyses were conducted between the high and low social pressure instructions for both the ageism and racism conditions. The results (Table 3) indicate that the type of instructions used, either high or low social pressure, did not significantly change the responses obtained from the participants on any

of the measures used in the study.

Table 3.

*Means, Standard Deviations, and Range Differences for Instructions*

	Low Instructions	High Instructions	<i>F</i>
<b>Ageism</b>			
AAS	-22 ± 20.4 (-80–25)	-22.3 ± 21.3 (-85–24)	.02
FSA	-30 ± 25.2 (-77–26)	-33.3 ± 24.1 (-80–20)	.91
OP	-22.2 ± 22.3 (-68–68)	-22.2 ± 22.6 (-68–43)	.00
FAQ1	-10.3 ± 2.7 (4–19)	10.7 ± 2.6 (3–16)	1.31
<b>Racism</b>			
ATB	-24.8 ± 27.7 (-71–75)	-27.5 ± 26.2 (-70–71)	.51
MRS	-7.2 ± 10.1 (-26–20)	-8.1 ± 10.5 (-28–18)	.43
ABS	.41 ± 15 (-31–40)	-.1 ± 26 (-39–38)	.05
<b>Both</b>			
M-C SDS	14.7 ± 5.5 (1–29)	15 ± 5.1 (2–27)	.23

*On-line vs. Lab*

Table 4 displays the findings when comparing on-line against lab participation for both the ageism and racism conditions. Significant differences were found between the on-line ( $M = -16.6$ ;  $SD = 19.2$ ) and lab conditions ( $M = -28.6$ ;  $SD = 20.8$ ) on the Anxiety about Aging Scale,  $F(1, 204) = 18.4$ ,  $p < .05$ ,  $d = .60$ , 95% C.I. = .32 to .88. Likewise, significant differences were found between the on-line ( $M = 9.9$ ;  $SD = 2.7$ ) and lab conditions ( $M = 11.2$ ;  $SD = 2.4$ ) on the Facts on Aging Quiz,  $F(1, 204) = 13.2$ ,  $p < .05$ ,  $d = -.51$ , 95% C.I. =  $-.78$  to  $-.23$ . No significant differences were found for the remaining measures in either condition.

Table 4.

*Means, Standard Deviations, and Range Differences for Groups*

Group	On-line	Lab	<i>F</i>	<i>d</i>	95% C.I.
<u>Ageism</u>					
AAS			18.41**	.60	.32 to .88
<i>M ± SD</i>	-16.6 ± 19.2	-28.6 ± 20.8			
Range	(-65–25)	(-85–12)			
FSA			2.83	.23	-.04 to .51
<i>M ± SD</i>	-29 ± 25.5	-34.7 ± 23.3			
Range	(-77–20)	(-80–26)			
OP			2.85	.24	-.04 to .51
<i>M ± SD</i>	-19.7 ± 24.3	-25 ± 19.7			
Range	(-68–68)	(-63–25)			
FAQ1			13.22**	-.51	-.78 to -.23
<i>M ± SD</i>	9.9 ± 2.7	11.2 ± 2.4			
Range	(3–16)	(6–19)			
M-C SDS			.72	-.04	-.31 to .24
<i>M ± SD</i>	15 ± 5.4	15.2 ± 5.2			
Range	(3–26)	(5–27)			

Racism

ATB			.03	-.03	-.30 to .25
<i>M ± SD</i>	25.8 ± 26.1	26.5 ± 27.9			
Range	(-35–75)	(-71–69)			
MRS			.48	.10	-.17 to .37
<i>M ± SD</i>	-7.2 ± 10	-8.2 ± 10.6			
Range	(-26–19)	(-28–20)			
ABS			.26	-.03	-.30 to .25
<i>M ± SD</i>	.34 ± 15.6	.75 ± 15.4			
Range	(-32–40)	(-39–40)			
M-C SDS			.04	-.02	-.29 to .26
<i>M ± SD</i>	14.5 ± 4.9	14.6 ± 5.6			
Range	(1–24)	(4–29)			

---

### *Anxiety about Aging Scale and Ageism*

Table 5 displays the correlations between all of the measures of ageism. Consistent with the terror-management hypothesis, the Anxiety about Aging Scale was significantly correlated with other measures of ageism. More specifically, greater levels of anxiety on the AAS were correlated with higher scores on the FSA ( $r = .57, p < .05, r^2 = .32, 95\% \text{ C.I.} = .48 \text{ to } .67$ ) and higher scores on the OP ( $r = .48, p < .05, r^2 = .23, 95\% \text{ C.I.} = .38 \text{ to } .58$ ).

### *Facts on Aging Quiz and Ageism*

As hypothesized, and shown in Table 5, a lack of knowledge about the aging process was significantly correlated with greater levels of ageism. More specifically, lower scores on the FAQ1 were correlated with higher scores on the FSA ( $r = -.32, p < .05, r^2 = .10, 95\% \text{ C.I.} = -.44 \text{ to } -.19$ ) and higher scores on the OP ( $r = -.30, p < .05, r^2 = .09, 95\% \text{ C.I.} = -.43 \text{ to } -.17$ ).

Table 5.

*Correlations Between Ageism Measures*

	AAS	FSA	OP	FAQ1
<b>AAS</b>				
Coefficient	1.00	.57**	.48**	-.32**
R <sup>2</sup>		.32	.23	.10
95% C.I.		.48 to .67	.38 to .58	-.44 to -.19
<b>FSA</b>				
Coefficient		1.00	.81**	-.32**
Effect size			.66	.11
95% C.I.			.77 to .86	-.44 to -.19
<b>OP</b>				
Coefficient			1.00	-.30**
Effect size				.09
95% C.I.				-.43 to -.17
<b>FAQ1</b>				
Coefficient				1.00
Effect size				
95% C.I.				

### *Effect of Experience on Ageism Endorsement*

Table 6 displays the correlations between the subjective experiential questions and measures of ageism. Current daily exposure was not associated with either increased or decreased levels of ageism; however, a relationship was noted between participants' reported history of exposure to older adults. More specifically, a past history of exposure to many older adults was correlated with lower scores on the AAS ( $r = -.34, p < .05, r^2 = .12, 95\% \text{ C.I.} = -.46 \text{ to } -.22$ ), FSA ( $r = -.38, p < .05, r^2 = .14, 95\% \text{ C.I.} = -.50 \text{ to } -.26$ ), OP ( $r = -.34, p < .05, r^2 = .12, 95\% \text{ C.I.} = -.46 \text{ to } -.22$ ), and higher scores on the FAQ1 ( $r = .19, p < .05, r^2 = .04, 95\% \text{ C.I.} = .05 \text{ to } .32$ ). In addition, a significant relationship was noted between lower scores on measures of ageism and whether or not the participants had ever provided care for an older adult(s). More specifically, a history of providing care for older adults was correlated with lower scores on the AAS ( $r = -.23, p < .05, r^2 = .05, 95\% \text{ C.I.} = -.36 \text{ to } -.10$ ), FSA ( $r = -.19, p < .05, r^2 = .04, 95\% \text{ C.I.} = -.32 \text{ to } -.05$ ), and the OP ( $r = -.14, p < .05, r^2 = .02, 95\% \text{ C.I.} = -.28 \text{ to } 0$ ).

Table 6.

*Correlations Between Experiential Questions and Ageism Measures*

	Present	Past	Provided Care
<b>AAS</b>			
Coefficient	-.06	-.34**	-.23**
R <sup>2</sup>	.00	.12	.05
95% C.I.	-.20 to .08	-.46 to -.22	-.36 to -.10
<b>FSA</b>			
Coefficient	-.04	-.38**	-.19**
Effect size	.00	.14	.04
95% C.I.	-.18 to .10	-.50 to -.26	-.32 to -.05
<b>OP</b>			
Coefficient	.05	-.34**	-.14**
Effect size	.00	.12	.02
95% C.I.	-.09 to .19	-.46 to -.22	-.28 to 0
<b>FAQ1</b>			
Coefficient	-.04	.19**	.02
Effect size	.00	.04	.00
95% C.I.	-.18 to .10	.05 to .32	-.12 to .16

### *Effect of Experience on Racism Endorsement*

Table 7 displays the correlations between the subjective experiential questions and measures of racism. Greater levels of daily exposure to Blacks was associated with decreased levels of racism as measured by the ATB ( $r = -.20, p < .05, r^2 = .04, 95\% \text{ C.I.} = -.33 \text{ to } -.07$ ), and the ABS ( $r = -.15, p < .05, r^2 = .02, 95\% \text{ C.I.} = -.29 \text{ to } -.01$ ). In addition, a history of exposure to greater numbers of Black individuals was correlated with lower scores on measures of racism including the ATB ( $r = -.20, p < .05, r^2 = .04, 95\% \text{ C.I.} = -.33 \text{ to } -.07$ ) and the MRS ( $r = -.15, p < .05, r^2 = .02, 95\% \text{ C.I.} = -.29 \text{ to } -.01$ ). Finally, the participants were asked whether they believe they were knowledgeable about certain African American customs and culture. A very small relationship was detected between being knowledgeable and endorsing less items of racism on the MRS ( $r = -.17, p < .05, r^2 = .03, 95\% \text{ C.I.} = -.31 \text{ to } -.03$ ).

Table 7.

*Correlations Between Experiential Questions and Racism Measures*

	Present	Past	Knowledge
<b>ATB</b>			
Coefficient	-.20**	-.20**	-.12
R <sup>2</sup>	.04	.04	.01
95% C.I.	-.33 to -.07	-.33 to -.07	-.26 to .02
<b>MRS</b>			
Coefficient	-.12	-.15*	-.17*
Effect size	.01	.02	.03
95% C.I.	-.26 to .02	-.29 to -.01	-.31 to -.03
<b>ABS</b>			
Coefficient	-.15*	-.06	-.08
Effect size	.02	.00	.01
95% C.I.	-.29 to -.01	-.20 to .08	-.22 to .06

## CHAPTER V

### DISCUSSION

Ageism, or the stereotyping and discrimination against older adults, is one of the most prevalent forms of social injustice in society today. Given the pervasiveness of ageism, it is somewhat surprising to find that there are very few institutional protections against this form of discrimination. Society's apathetic approach coupled with the findings that the effects of racism are diminishing faster than those of ageism suggest that ageism is more socially accepted than other forms of discrimination (Palmore, 2005). A thorough review of the literature was conducted and there were no studies identified comparing the prevalence and social acceptability of ageist beliefs as compared to racism. As a result, the present study was designed to measure whether or not the endorsement of ageist and racist beliefs are differentially affected by social situations.

The current study did not support the hypothesis that ageism is more socially acceptable than racism. More specifically, there were no significant differences observed on specific measures of ageism (FSA, OP) when they were completed on-line or in the lab. Likewise, no significant differences were observed on measures of racism when they were completed on-line or in the lab. A measure of social desirability was also included as a test to see if the experimental manipulation (i.e. presence of others, pressured instructions) was actually increasing the level of social pressure experienced by the participants. Unfortunately, it appears that the instructions and the presence of others did not affect the way in which the participants responded. As a result, the results for this particular hypothesis are thought to be invalid since the fundamental component of social pressure was not achieved.

An additional hypothesis tested in this study was the idea that anxiety about the process of aging increases the likelihood that participants will endorse ageist beliefs. This terror management hypothesis postulates that older individuals are a constant reminder to younger people of their inevitable loss of utility, burdensomeness to society, and eventual death (Greenberg, Pyszczynski, & Solomon, 1986; Solomon, Greenberg, & Pyszczynski, 1991). Consistent with much of the literature on stereotypes, people will begin to assign negative traits to these groups so that they can arbitrarily distance themselves psychologically. As a result, younger individuals that are anxious about the process of aging will begin to believe that all older adults share a larger amount of intergroup similarities while discounting the presence of substantial differences within the group. These similarities often include: being stingy and hoarding possessions; inability to change; living in the past; poor personal hygiene; complaining more than younger people do; irritating others by sharing the same stories repeatedly; and incapable of taking care of themselves. Likewise, younger people will also believe there are much larger intragroup differences between themselves and older adults despite the many apparent shared similarities. The results from the current study support the terror management theory. A measure of anxiety about aging (AAS) revealed a moderate and significant, positive correlation with the other administered measures of ageism (FSA, OP). In other words, participants that expressed having a lot of anxious thoughts and feelings about the process of aging were significantly more likely to endorse beliefs consistent with ageism.

Finally, it was hypothesized that the possession of more knowledge about the process of aging would lead to the recognition that many of the stereotypes and beliefs

about older adults are nothing more than myths. Previous studies have supported the idea that increased recognition that the attributes typically associated with aging are inaccurate results in a decreased chance of endorsing ageism values and beliefs (Matthews, Tindale, & Norris, 1984). The findings revealed a small, but significant negative correlation between a measure of aging knowledge (FAQ1) and measures of ageism (FSA, OP). These findings are consistent with many studies in the literature suggesting that altering negative attitudes associated with ageism may be possible by giving people accurate information about older people (Jackson, Cherry, Smitherman, & Hawley, 2008; Cottle & Glover, 2007; Ragan & Bowen, 2001).

Additional analyses revealed a significant relationship between the participants' subjective level of past exposure to older adults and ageist beliefs. The findings from the current study are consistent with many of the studies in the literature that suggest more exposure to older adults decreases the endorsement of items related to ageism. Interestingly, the ageism scores were not affected by current, daily exposure to older adults suggesting many of these beliefs are ingrained from a very early age. This finding is consistent with the social-developmental perspective on stereotyping and discrimination (Taylor, Peplau, & Sears, 2000).

The results from this study replicate many of the previous findings in the literature regarding ageism. More specifically, it supports the terror management theory that younger adults who are anxious around older adults will stereotype to exaggerate possible differences. Consistent with much of the literature on other stereotypes, these superficial differences help people avoid the threatening thoughts that they are, in fact, quite similar to the attitude object. In addition, the current study provides additional

support for education as a means for combating ageism. If ageism is going to be properly addressed, it is going to require the education of younger adults about the realistic process of aging in addition to increasing the recognition that older adults share a lot of commonalities with younger adults. Although this study did not support the notion that ageism is more socially acceptable than racism, there are a number of ways to improve the methods used to better test this hypothesis.

Future research should attempt to test the social acceptability of ageism by having the attitudinal object present. The current study was unable to increase the level of social pressure felt by the groups as indicated by their level of social desirability. They answered the same regardless of their group assignment and this is most likely because the social pressure experienced was very artificial. Giving someone instructions that attempt to make the participant feel pressured is not nearly as effective as having the group being stereotyped against present. This might include having an older adult give the measures to the younger adults or having a younger Black individual administer the measures of racism. This would certainly test whether or not people will endorse the stereotypes regardless of the social situation.

Another possible way to test this hypothesis might be to have the participants connected to a physiological feedback system while being asked the questions by the researcher. There are a number of ways to measure a person's emotional reactions and appraisal while being asked a series of questions (e.g. galvanic skin response). A future study could orally ask the participant the questions from the various instruments while measuring their level of emotional responding. It is likely that participants will display a much greater level of discomfort when answering questions related to racism since this

form of discrimination is very well-known whereas the concept of ageism is underaddressed. The difference between their level of responding could then be tested for significance. This would be the most accurate way of detecting whether or not there is any filter in place when it comes to endorsing ageist values and beliefs.

## REFERENCES

- American Psychological Association (APA). (2002). *Ethical principles of psychologists and code of conduct*. Washington, DC: American Psychological Association.
- American Psychological Association (APA). (2005). *Aging issues: elder abuse and neglect: In search of solutions*. Washington, DC: American Psychological Association.
- Anderson, D., & Wiscott, R. (2003). Comparing social work and non-social work students' attitude about aging: Implications to promote work with elders. *Journal of Gerontological Social Work, 42*, 21-36.
- Arluke A., & Levin, J. (1984). Another stereotype: Old age as a second childhood. *Aging, 346*, 7-11.
- Aronoff, C. (1974). Old age in prime time. *The Journal of Communication, 24*, 86-87.
- Avolio, B. J., & Barrett, G. V. (1987). Effects of age stereotyping in a simulated interview. *Psychology and Aging, 2*, 56-63.
- Becker, E. (1973). *The denial of death*. New York, NY: Free Press.
- Bendick, M., Brown, L. E., & Wall, K. (1999). No foot in the door: An experimental study of employment discrimination against older workers. *Journal of Aging and Social Policy, 10*, 5-23.
- Brigham, J. C. (1993). College students' racial attitudes. *Journal of Applied Social Psychology, 23*, 1933-1967.
- Butler, R. (1987), *Ageism: The encyclopedia of ageing*. Springer, New York, NY.
- Butler, R., Kim, K., Curran, M., Estrine, J., Gallagher, J., Knapp, K., et al. (2006).

- Ageism in America*. New York, NY: International Longevity Center-USA.
- Caporael, L. R., & Culbertson, G. H. (1986). Verbal response modes of baby talk and other speech at institutions for the aged. *Language & Communication*, 6, 99-112.
- Carmichael, C. W. (1976). Communication and gerontology: Interfacing disciplines. *Journal of the Western Speech Communication Association*, 40, 121-129.
- Cicirelli, V. G. (2002). Fear of death in older adults: Predictions from Terror Management Theory. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 57, 358-366.
- Clark, R. L., Burkhauser, R. V., Moon, M., Quinn, J. F., & Smeeding, T. M. (2004). *The Economics of an aging society*. Malden, MA: Blackwell Publishing.
- Cleveland, J. N., & Landy, F. J. (1983). The effects of person and job stereotypes on two personnel decisions. *Journal of Applied Psychology*, 68, 609-619.
- Cleveland, J. N., & Shore, L. M. (1992). Self-and supervisory perspectives on age and work attitudes and performance. *Journal of Applied Psychology*, 77, 469-484.
- Commission on Legal Problems of the Elderly, American Bar Association. (2002). *American Bar Association on legal problems of the elderly, report to the House of Delegate*. Chicago, IL: American Bar Association.
- Cottle, N. R., & Glover, R. J. (2007). Combating ageism: Change in student knowledge and attitudes regarding aging. *Educational Gerontology*, 33, 501-512.
- Coupland, N., Coupland, J., Giles, G., & Henwood, K. (1988). Accommodating the elderly: Invoking and extending a theory. *Languages and Society*, 17, 1-41.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.

- Dahl, R. (1964). *Charlie and the chocolate factory*. New York, NY: Alfred A. Knopf, Inc.
- Davis, J. A., Smith, T., & Marsden, P. V. (2003). *General social survey 2002*. Princeton, NJ: Cultural Policy and the Arts National Data Archive.
- Davis, R. N. (1999). Web-based administration of a personality questionnaire: Comparison with traditional methods. *Behavior Research Methods, Instruments, & Computers, 31*, 572-577.
- Dedrick, E. J., & Dobbins, G. H. (1991). The influence of subordinate age on managerial actions: An attributional analysis. *Journal of Organizational Behavior, 12*, 367-377.
- Donlon, M. M., Ashman, O., & Levy, B. R. (2005). Re-vision of older television characters: A stereotype-awareness intervention. *Journal of Social Issues, 61*, 307-319.
- Dovidio, J. F., Kawakami, K., & Gaertner, S. L. (2002). Implicit and explicit prejudice and interracial interaction. *Journal of Personality and Social Psychology, 82*, 62-68.
- Du, X. L., Key, C. R., Osborne, C., Mahnken, J. D., & Goodwin, J. S. (2003). Discrepancy between consensus recommendations and actual community use of adjuvant chemotherapy in women with breast cancer. *Annals of Internal Medicine, 138*, 90-97.
- Federal Interagency Forum on Aging-Related Statistics. (2008). *Older Americans 2008: Key indicators of well-being*. Washington, DC: U.S. Government Printing Office.
- Ferris, G. R., Yates, V. L., Gilmore, D. C., & Rowland, K. M. (1985). The influence of

- subordinate age on performance rating and causal attributions. *Personnel Psychology*, 38, 545-557.
- Fillmer, H. T. (1982). Children's descriptions of and attitudes toward the elderly. *Educational Gerontology*, 10, 99-107.
- Fraboni, M., Saltstone, R., & Hughes, S. (1990). The Fraboni Scale of Ageism (FSA): An attempt at a more precise measure of ageism. *Canadian Journal on Aging*, 9, 56-66.
- Freierman, S. (2006, March 15). We're spending more time watching TV. *The New York Times*, p. C3.
- Gerbner, C., Gross, L., Signorielli, N., & Morgan, M. (1980). Aging with television: Images on television drama and conceptions of social reality. *Journal of Communication*, 30, 37-47.
- Gerbner, G., & Ozyegin, N. (1997). *Proportional representation of diversity index*. Cultural Indicators Project. In *Diversity in Film and Television, Issue Brief Series* (1997). Studio City, CA: Mediascope Press.
- Godlovitch, G. (2003). Age discrimination in trials and treatment: Old dogs and new tricks. *Monash Bioethics Review*, 22, 66-77.
- Goldenberg, J., Pyszczynski, T., Greenberg, J., & Solomon, S. (2000). Fleeing the body: A terror management perspective on the problem of human corporeality. *Personality and Social Psychology Review*, 4, 200-218.
- Greenberg, J., Pyszczynski, T., & Solomon, S. (1986). The causes and consequences of the need for self-esteem: A terror management theory. In R. F. Baumeister (Ed.), *Public self and private self* (pp. 189-212). New York, NY: Springer: Verlag.

- Greenberg, J., Pyszczynski, T., Solomon, S., Rosenblatt, A., Veeder, M., Kirkland, et al. (1990). Evidence for terror management theory II: The effects of mortality salience reactions to those who threaten or bolster the cultural worldview. *Journal of Personality and Social Psychology*, 58, 308-318.
- Greenberg, J., Schimel, J., & Martens, A. (2002). Ageism: Denying the face of the future. In T. D. Nelson (Ed.), *Ageism: Stereotyping and prejudice against older persons* (pp. 27-48). Cambridge, MA: MIT Press.
- Greene, M. G., Adelman, R. D., Charon, R., & Friedmann, E. (1989). Concordance between physicians and their older and younger patients in the primary care medical encounter. *The Gerontologist*, 29, 808-813.
- Hajjar, I., Miller, K., & Hirth, V. (2002). Age-related bias in the management of hypertension: A national survey of physicians' opinions on hypertension in elderly adults. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, 57, 487-491.
- Harris, D.K., Changas, P.S., & Palmore, E.B. (1996). Palmore's first facts on aging quiz in a multiple-choice format. *Educational Gerontology*, 22, 575-589.
- Hatchett, B. F., Holmes, K., & Ryan, E. (2002). Attitudes of a predominantly Hispanic college sample towards older adults. *Journal of Gerontological Social Work*, 37, 45-59.
- Hickey, T., Hickey, L. A., & Kalish, R. A. (1968). Children's perceptions of the elderly. *Journal of Genetic Psychology*, 112, 227-235.
- Hickey, T., & Kalish, R. A. (1968). Young people's perceptions of adults. *Journal of Gerontology*, 112, 227-235.

- Hillerbrand, E., & Shaw, D. (1990). Age bias in a general hospital: Is there ageism in psychiatric consultation? *Clinical Gerontologist*, 2, 3-13.
- Hirsch, B. T., Macpherson, D. A., & Hardy, M. A. (2000). Occupational age structures and access for older workers. *Industrial and Labor Relations Review*, 53, 401-418.
- Hodes, R. L. (1997). Meeting the challenges of an aging population. *Academic Medicine*, 72, 892-893.
- Hummert, M. L., Shaner, J. L., Garstka, T. A., & Henry, C. (1998). Communication with older adults: The influence of age stereotypes, context, and communicator age. *Human Communication Research*, 25, 124-151.
- Hutchins, L. F., Unger, J. M., Crowley, J. J., Coltman, C. A., & Albain, K. S. (1999). Underrepresentation of patients 65 years of age or older in cancer-treatment trials. *The New England Journal of Medicine*, 341, 2061-2067.
- Isaacs, L. W., & Bearison, D. J. (1986). The development of children's prejudice against the aged. *International Journal of Aging and Human Development*, 23, 175-195.
- Ivester, C., & King, K. (1977). Attitudes of adolescents toward the aged. *Gerontologist*, 17, 85-89.
- Jackson, E. M., Cherry, K. E., Smitherman, E. A., & Hawley, K. S. (2008). Knowledge of memory aging and Alzheimer's disease in college students and mental health professionals. *Aging & Mental Health*, 12, 258-266.
- Jefferys, M. (1996). Cultural aspects of ageing: Gender and intergenerational issues. *Social Science and Medicine*, 43, 681-687.
- Joinson, A. (1999). Social desirability, anonymity, and internet-based questionnaires.

- Behavior Research Methods, Instruments, & Computers*, 31, 433-438.
- Katz, I., & Hass, R. G. (1988). Racial ambivalence and American value conflict: Correlational and priming studies of dual cognitive structures. *Journal of Personality and Social Psychology*, 55, 893-905.
- Keeler, E., Solomon, D., Beck, J., Mendenhall, R., & Kane, R. (1982). Effect of patient age on duration of medical encounters with physicians. *Medical Care*, 20, 1101-1108.
- Kimmel, D. C. (1988). Ageism, psychology, and public policy. *American Psychologist*, 43, 175-178.
- Kite, M. E., Deaux, K., & Miele, M. (1991). Stereotypes of young and old: Does age outweigh gender? *Psychology and Aging*, 6, 19-27.
- Kite, M. E., & Johnson, B. T. (1988). Attitudes toward older and younger adults: A meta-analysis. *Psychology and Aging*, 3, 233-244.
- Klein, D., Council, K., & McGuire, S. (2005). Education to promote positive attitudes about aging. *Educational Gerontology*, 31, 591-601.
- Kogan, N. (1961). Attitudes toward old people: The development of a scale and an examination of correlates. *Journal of Abnormal and Social Psychology*, 62, 44-54.
- Kogan, N., Stephens, J. W., & Shelton, F. C. (1961). Age differences: A developmental study of discriminability and affective response. *Journal of Abnormal and Social Psychology*, 62, 221-230.
- Krueger, B. (2001). How aging is covered in the print media. *Generations: Journal of the American Society on Aging*, 25, 10-12.
- Langer, S. K. (1982). *Mind: An essay on human feeling*. Baltimore, MD: Johns Hopkins

- University Press.
- Langlois, J. H., Kalakanis, L. E., Rubenstein, A. J., Larson, A. D., Hallam, M. J., & Smoot, M. T. (2000). Maxims and myths of beauty: A meta-analytic and theoretical review. *Psychological Bulletin, 126*, 390-423.
- Lasher, K. P., & Faulkender, P. J. (1993). Measurement of aging anxiety: Development of the Anxiety about Aging Scale. *International Journal of Aging and Human Development, 37*, 247-259.
- Levy, B. R., & Banaji, M. R. (2002). Implicit Ageism. In T. D. Nelson (Ed.), *Ageism: Stereotyping and prejudice against older persons* (pp. 49-75). Cambridge, MA: MIT Press.
- Lewis, M., & Brooks-Gunn, J. (1979). *Social cognition and the acquisition of self*. New York, NY: Plenum Press.
- Marcoen, A. (1979). Children's perceptions of age persons and grandparents. *International Journal of Behavioral Development, 2*, 87-105.
- Marks, R., Newman, S., & Onawola, R. (1985). Latency-aged children's views of aging. *Educational Gerontology, 11*, 89-99.
- Matthews, A. M., Tindale, J. A., & Norris, J. E. (1984). The Facts on Aging Quiz: A Canadian validation and cross-cultural comparison. *Canadian Journal on Aging, 3*, 165-174.
- Maurer, T. J., & Rafuse, N. E. (2001). Learning, not litigating: Managing employee development and avoiding claims of age discrimination. *Academy of Management Executive, 15*, 110-121.
- McCann, R. (2003). *Age discrimination in employment legislation in the United States*

- Experience*. Washington, DC: AARP Foundation Litigation.
- McCann, R., & Giles, H. (2002). Ageism in the workplace: A communication perspective. In T. D. Nelson (Ed.), *Ageism: Stereotyping and prejudice against older persons* (pp. 163-199). Cambridge, MA: MIT Press.
- McConahay, J. B. (1983). Modern racism and modern discrimination: The effects of race, racial attitudes, and context on simulated hiring decisions. *Personality and Social Psychology Bulletin*, 9, 551-558.
- Meltzoff, A. N., & Moore, M. K. (1977). Imitation of facial and manual gestures by human neonates. *Science*, 198, 75-78.
- Miller, S. M., Blalock, J., & Ginsberg, H. J. (1985). Children and the aged: Attitude, contact and discriminative ability. *International Journal of Aging and Human Development*, 19, 47-53.
- Montepare, J. M., Steinberg, J., & Rosenberg, B. (1992). Characteristics of vocal communication between young adults and their parents and grandparents. *Communication Research*, 19, 479-492.
- National Center for Chronic Disease Prevention and Health Promotion (CDC). (2003). *Healthy aging for older adults*. Washington, DC: U.S. Department of Health & Human Services.
- National Center for Chronic Disease Prevention and Health Promotion (CDC). (2004). *The state of aging and health in America 2004*. Washington, DC: U.S. Department of Health & Human Services.
- National Center for Health Statistics. (2007). *Health, United States, 2007 with chartbook on trends in the health of Americans*. Hyattsville, MD: U.S. Government Printing

- Office.
- National Center on Elder Abuse (NCEA). (2005). *FAQ's about elder abuse*. Washington, DC: National Center on Elder Abuse.
- Nelson, T. D. (2002). Ageism: A critical review of current research and theory. In T. D. Nelson (Ed.), *The psychology of prejudice*. Needham Heights, MA: Allyn and Bacon.
- Page, S., Olivas, R., Driver, J., & Driver, R. (1981). Children's attitudes toward the elderly and aging. *Educational Gerontology*, 7, 43-47.
- Palmore, E. D. (1977). Facts on aging: A short quiz. *Gerontologist*, 17, 315-320.
- Palmore, E. D. (1988). *The Facts on Aging Quiz*. New York, NY: Springer.
- Palmore, E. D. (1990). *Ageism, negative and positive*. New York, NY: Springer.
- Palmore, E. D. (2005). Three decades of research on ageism. *Generations: Journal of the American Society on Aging*, 29, 87-90.
- Payne, B. K., Burkley, M. A., & Stokes, M. B. (2008). Why do implicit and explicit attitude tests diverge? The role of structural fit. *Journal of Personality and Social Psychology*, 94, 16-31.
- Pillemer, K., & Finkelhor, D. (1988). The prevalence of elder abuse: A random sample survey. *The Gerontologist*, 28, 51-57.
- Plattman, K., & Tinker, A. (1998). Getting on in the BBC: A case study of older workers. *Ageing and Society*, 18, 513-535.
- Pratkanis, A. R., & Aronson, E. (2002). *Age of propaganda: The everyday use and abuse of persuasion* (4<sup>th</sup> ed.). New York, NY: W. H. Freeman & Company.
- Ragan, A. M., & Bowen, A. M. (2001). Improving attitudes regarding the elderly

- population: The effects of information and reinforcement for change. *The Gerontologist*, 41, 511-515.
- Robinson, S. B., & Rosher, R. B. (2001). Effect of the “Half-Full Aging Simulation Experience” on medical students’ attitudes. *Gerontology & Geriatrics Education*, 21, 3-12.
- Rodin, J., & Langer, E. J. (1980). Aging labels: The decline of control and the fall of self-esteem. *Journal of Social Issues*, 36, 12-29.
- Rupp, D. E., Vodanovich, S. J., & Crede, M. (2005). The multidimensional nature of ageism: Construct validity and group differences. *The Journal of Social Psychology*, 145, 335-362.
- Rupp, D. E., Vodanovich, S. J., & Crede, M. (2006). Age bias in the workplace: The impact of ageism and causal attributions. *Journal of Applied Social Psychology*, 36, 1337-1364.
- Rylant, C. (1994). *Mr. Putter & Tabby pour the tea*. Orlando, FL: Harcourt Brace & Company.
- Rylant, C. (2006). *Henry and Mudge and the great grandpas*. New York, NY: Scholastic Inc.
- Safer, D. J. (1997). Adolescent/Adult difference in suicidal behavior and outcome. *Annals of Clinical Psychiatry*, 9, 61-66.
- Salthouse, T. A., & Maurer, T. J. (1996). Aging, job performance, and career development. In J. E. Birren & K. W. Schaie (Eds.), *Handbook of psychology of aging* (pp.353-364). San Diego, CA: Academic Press.
- Schoonmaker, M. E. (2001). A beat comes of age. *Columbia Journalism Review*, 39, 53-

55.

- Schwiebert, D. C. (1978). Unfavorable stereotyping of the aged as a function of death anxiety, sex, perception of elderly relatives, and a death anxiety-repression interaction. *Dissertation Abstracts International*, 39 (6-B), 3007.
- Seefeldt, C., Jantz, R. K., Galper, A., & Serock, K. (1977). Using pictures to explore children's attitudes toward the elderly. *The Gerontologist*, 17, 506-512.
- Signorielli, N. (2004). Aging on television: Messages relating to gender, race, and occupation in prime time. *Journal of Broadcasting & Electronic Media*, 48, 279-301.
- Signorielli, N., & Kahlenberg, S. (2001). Television's world of work in the nineties. *Journal of Broadcasting & Electronic Media*, 45, 1-19.
- Simmons, L. W. (1945). *The role of the aged in primitive society*. New Haven, CT: Yale Univ. Press.
- Singer, M. S. (1986). Age stereotypes as a function of profession. *Journal of Social Psychology*, 126, 691-692.
- Solomon, S., Greenberg, J., & Pyszczynski, T. (1991). Terror management theory of self-esteem. In C. R. Snyder & D. Forsyth (Eds.), *Handbook of social and clinical psychology: The health perspective* (pp. 21-40). New York, NY: Pergamon Press.
- Taylor, S. E., Peplau, L. A., & Sears, D. O. (2000). *Social psychology*. Upper Saddle River, NJ: Prentice Hall.
- Thimm, C., Rademacher, U., & Kruse, L. (1998). Age stereotypes and patronizing messages: Features of age-adapted speech in technical instructions to the elderly. *Journal of Applied Communication Research*, 26, 66-82.

- U.S. Department of Health and Human Services. (2005). *Budget in Brief, FY 2006*. Washington, DC: National Institute on Aging: U.S. Department of Health and Human Services/National Institutes of Health.
- Waldman, D. A., & Avolio, B. J. (1986). A meta-analysis of age differences in job performance. *Journal of Applied Psychology, 71*, 33-38.
- Williams, A., & Nussbaum, J. F. (2001). *Intergenerational communication across the lifespan*. Hillside, NJ: Erlbaum.
- Wittenbrink, B., Judd, C. M., & Park, B. (2001). Spontaneous prejudice in context: Variability in automatically activated attitudes. *Journal of Personality and Social Psychology, 81*, 815-827.
- Wolf, R. (1999). *Elder Shelters: U.S., Canada, and Japan*. Washington, DC: National Center on Elder Abuse.
- Woolf, L. M. (1998). Elder abuse and neglect. Retrieved February 2, 2008 from <http://www.webster.edu/~woolfm/abuse.html>.
- Zebrowitz, L. A. (1996). Physical appearance as a basis for stereotyping. In N. McRae, M. Hewstone, & C. Stangor (Eds.), *Foundation of stereotypes and stereotyping* (pp. 79-120). New York, NY: Guilford Press.
- Zebrowitz, L. A., & Montepare, J. M. (2000). Too young, too old: Stigmatizing adolescents and elders. In T. F. Heatherton, R. E. Kleck, M. R. Hebl, & J. G. Hull (Eds.), *The social psychology of stigma* (pp. 334-373). New York, NY: Guilford Press.

## APPENDIX A

**Oklahoma State University Institutional Review Board**

Date: Thursday, April 02, 2009  
IRB Application No AS0924  
Proposal Title: Social Acceptance of Age Discrimination: A Comparison Between Explicit Ageism and Racism  
Reviewed and Processed as: Expedited

**Status Recommended by Reviewer(s): Approved Protocol Expires: 4/1/2010**

Principal Investigator(s):

John M. Chaney 116 N. Murray Stillwater, OK 74078	Nicholas Matthew Wisdom 1108 S. Fern St. Stillwater, OK 74074
---	---

---

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,



Shelia Kennison, Chair  
Institutional Review Board

## INFORMED CONSENT

**Project Title:**

Attitudes and Beliefs about Others

**Investigators:**

John Chaney, Ph.D.  
Nick M. Wisdom, M.S.

**Purpose:**

The purpose of this research study is to gain a greater understanding of the prevalence and cause of certain beliefs about other groups of individuals.

**Procedures:**

You will be asked to complete a number of tests that are designed to measure your beliefs and attitudes about certain groups of people. Upon completion of this Informed Consent, you will be asked to complete a packet containing several measures. It will take approximately 45 minutes to complete all of the measures. You are free to withdraw your consent and participation in this project at any time without penalty.

**Risks of Participation:**

There are no known risks associated with this project which are greater than those ordinarily encountered in daily life.

**Benefits:**

This study may benefit society by helping us gain a greater understanding about the etiology and prevalence of certain attitudes and beliefs about others in a college population.

**Confidentiality:**

The records of this study will be kept private. Any written results will discuss group findings and will not include information that will identify you. Research records will be stored securely for 5 years after the publication of the research and only researchers and individuals responsible for research oversight will have access to the records. It is possible that the consent process and data collection will be observed by research oversight staff responsible for safeguarding the rights and wellbeing of people who participate in research.



Compensation:

You will receive extra credit for your participation in this experiment for any introductory, lower-level psychology, or other course of your choosing provided you have permission from the instructor. A record of your participation will appear on Sona within 48 hours of your participation. If for any reason you decide not to complete the entire experiment, full credit will still be given to you. In introductory psychology courses, students are required to earn six "units" of research experience. This requirement may be fulfilled in one of three ways: (1) serving as a human participant in six current research project(s), (2) attending six Undergraduate Research Colloquia, or (3) researching and writing six 3-4 page papers on six designated research topics. Each hour of participation in a research project as a participant is generally regarded as satisfying one "unit" of the requirement, and students participating in this study will earn one hour (or "units") of credit.

Contacts:

You may contact the investigators of this experiment, Dr. John Chaney (405) 744-5703, or Nick Wisdom (nick.wisdom@okstate.edu) should you have any further questions.

If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-1676 or [irb@okstate.edu](mailto:irb@okstate.edu).

Participant Rights:

Participation in this experiment is voluntary; there is no penalty for refusal to participate. You are free to withdraw your consent and participation in this project at any time without penalty.

IRB Approval:

This research study has been approved by the Institutional Review Board (IRB A50924) for the protection of human subjects at Oklahoma State University. The IRB approval will expire on 04-01-2010.



Signatures:

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy of this form has been given to me.

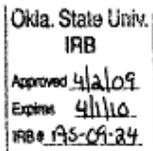
\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

I certify that I have personally explained this document before requesting that the participant sign it.

\_\_\_\_\_  
Signature of Researcher

\_\_\_\_\_  
Date



## APPENDIX B

## Instructions:

Relationships with elderly adults are a very important issue, because prejudice and discrimination continue to exist, sometimes in subtle ways. One way that people can overcome the scourge of prejudice is by continually being vigilant for biased tendencies in their own attitudes, opinions, and behavior. Your opinions are important to us. We ask that you express your own attitudes and opinions, keeping in mind the possibility that we are all vulnerable to biases against the elderly.

Did you read the directions above? Circle your answer below.

Yes, I have read the instructions above.

No, I did not read the instructions above.

## Demographics

**Instructions:** Please **write or circle** the answer that best fits you.

Please write in your age in the following blank space. \_\_\_\_\_

Please circle your gender.

Male

Female

Please circle your ethnicity.

Caucasian

African American

Hispanic or Latino

Asian American

Native American

Other

Please circle your level of education.

No high school

Some high school

High school graduate

Some college

College graduate

Graduate level degree

Higher (PhD/MD/etc.)

Please circle your level of occupation.

Higher executives, business owner over 100K, major professionals

Business managers, mid-size business owners, lesser professionals

Administrative personnel, small business owners, minor professionals

Clerical and sales workers, technicians, owners of little businesses (under 6,000)

Skilled manual employees

Machine operators and semi-skilled employees

Students, unskilled employees, and housewives

Please circle which of the following choices best describes your upbringing, overall, in terms of socio-economic standing.

Lower class standing

Lower middle class standing

Middle class standing

Upper middle class standing

Upper class standing

## Experience

**Instructions:** Please place answer the following questions about yourself by placing an **X** on the line above the choice that best represents your experience.

On a typical day, how many individuals over the age of 65 do you communicate with?

\_\_\_\_\_

0            1            2-3            4-7            8+

How much time did you spend communicating with individuals over the age of 65 when growing up (e.g. grandparents)?

\_\_\_\_\_

None            Very little            Some            Quite a bit            A lot

How many individuals over the age of 65 have you provided regular assistance to help them with their daily activities?

\_\_\_\_\_

None            Very few            Some            Quite a few            A lot

## AAS

**Instructions:** Please rate the extent to which you agree or disagree with each of the following statements. Please place an **X** on the line above the number that best represents how you think, feel, or act. Remember- your answers will be kept confidential.

I enjoy being around old people.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

I fear that when I am old all my friends will be gone.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

I like to go visit my older relatives.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

I have never lied about my age in order to appear younger.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

I fear it will be very hard for me to find contentment in old age.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

The older I become, the more I worry about my health.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

I will have plenty to occupy my time when I am old.



I get nervous when I think about someone else making decisions for me when I am old.



It doesn't bother me at all to imagine myself as being old.



I enjoy talking with old people.



I expect to feel good about life when I am old.



I have never dreaded the day I would look in the mirror and see gray hairs.



I feel very comfortable when I am around an old person.



I worry that people will ignore me when I am old.



I have never dreaded looking old.



I believe that I will still be able to do most things for myself when I am old.



I am afraid that there will be no meaning in life when I am old.



I expect to feel good about myself when I am old.



I enjoy doing things for old people.



When I look in the mirror, it bothers me to see how my looks have changed with age.



## FAQ1

**Instructions:** Please circle the letter with the correct answer. Remember- your answers will be kept confidential.

1. The proportion of people over 65 who are senile (have impaired memory, disorientation, or dementia) is:
  - a. about 1 in 100
  - b. about 1 in 10
  - c. about 1 in 2
  - d. the majority
  
2. The senses that tend to weaken in old age are:
  - a. sight and hearing
  - b. taste and smell
  - c. sight, hearing, and touch
  - d. all five senses
  
3. The majority of old couples:
  - a. have little or no interest in sex
  - b. are not able to have sexual relations
  - c. continue to enjoy sexual relations
  - d. think sex is only for the young

4. Lung vital capacity in old age:
  - a. tends to decline
  - b. stays about the same among non-smokers
  - c. tends to increase among healthy old people
  - d. is unrelated to age
  
5. Happiness among old people is:
  - a. rare
  - b. less common than among younger people
  - c. about as common as among younger people
  - d. more common than among younger people
  
6. Physical strength:
  - a. tends to decline with age
  - b. tends to remain the same among healthy old people
  - c. tends to increase among healthy old people
  - d. is unrelated to age
  
7. The percentage of people over 65 in long-stay institutions (such as nursing homes, mental hospitals, and homes for the aged) is about:
  - a. 5%
  - b. 10%
  - c. 25%
  - d. 50%

8. The accident rate per driver over age 65 is:
- a. higher than for those under 65
  - b. about the same as for those under 65
  - c. lower than for those under 65
  - d. unknown
9. Most workers over 65:
- a. work less effectively than younger workers
  - b. work as effectively as younger workers
  - c. work more effectively than younger workers
  - d. are preferred by most employers
10. The proportion of people over 65 who are able to do their normal activities is about:
- a. one-tenth
  - b. one-quarter
  - c. one-half
  - d. three-fourths
11. Adaptability to change among people over 65 is:
- a. rare
  - b. present among about half
  - c. present among most
  - d. more common than among younger people

12. As for old people learning new things:

- a. most are unable to learn at any speed
- b. most are able to learn, but at a slower speed
- c. most are able to learn as fast as younger people
- d. learning speed is unrelated to age

13. Depression is more frequent among:

- a. people over 65
- b. adults under 65
- c. young people
- d. children

14. Old people tend to react:

- a. slower than younger people
- b. at about the same speed as younger people
- c. faster than younger people
- d. slower or faster than younger people, depending on the type of test

15. Old people tend to be:

- a. more alike than younger people
- b. the same as younger people in terms of their likeness
- c. less alike than younger people
- d. more alike in some respects and less alike in others

16. Most old people say:

- a. they are seldom bored
- b. they are sometimes bored
- c. they are often bored
- d. life is monotonous

17. The proportion of old people who are socially isolated is:

- a. almost all
- b. about half
- c. less than a fourth
- d. almost none

18. The accident rate among workers over 65 tends to be:

- a. higher than among younger workers
- b. about the same as among younger workers
- c. lower than among younger workers
- d. unknown because there are so few workers over 65

19. The proportion of the U.S. population now age 65 or over is:

- a. 3%
- b. 13%
- c. 23%
- d. 33%

20. Medical practitioners tend to give older patients:

- a. lower priority than younger patients
- b. the same priority as younger patients
- c. higher priority than younger patients
- d. higher priority if they have Medicaid

21. The poverty rate (as defined by the federal government) among old people is:

- a. higher than among children under age 18
- b. higher than among all persons under 65
- c. about the same as among persons under 65
- d. lower than among persons under 65

22. Most old people are:

- a. employed
- b. employed or would like to be employed
- c. employed, do housework or volunteer work, or would like to do some kind of work
- d. not interested in any work

23. Religiosity tends to:

- a. increase in old age:
- b. decrease in old age:
- c. be greater in the older generation than in the younger generations
- d. be unrelated to age

24. Most old people:

- a. are seldom angry
- b. are often angry
- c. are often grouchy
- d. often lose their tempers

25. The health and economic status of old people (compared to younger people) in the year 2020 will:

- a. be higher than now
- b. be about the same as now
- c. be lower than now
- d. show no consistent trend

## FSA

**Instructions:** Please rate the extent to which you agree or disagree with each of the following statements. Please place an **X** on the line above the number that best represents how you think, feel, or act. Remember- your answers will be kept confidential.

Many old people are stingy and hoard their money and possessions.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Many old people are not interested in making new friends, preferring instead the circle of friends they have had for years.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Many old people just live in the past.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Most old people should not be trusted to take care of infants.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Many old people are happiest when they are with people their own age.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Most old people would be considered to have poor personal hygiene.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Most old people can be irritating because they tell the same stories over and over again.



Old people complain more than other people do.



I would prefer not to go to an open house at a senior's club, if invited.



Teenage suicide is more tragic than suicide among the old.



I sometimes avoid eye contact with old people when I see them.



I don't like it when old people try to make conversation with me.



Complex and interesting conversation cannot be expected from most old people.



Feeling depressed when around old people is probably a common feeling.



Old people should find friends their own age.



Old people should feel welcome at the social gatherings of young people.



Old people don't really need to use our community sports facilities.



It is best that old people live where they don't bother anyone.



The company of most old people is quite enjoyable.



It is sad to hear about the plight of the old in our society these days.



Old people should be encouraged to speak out politically.



Most old people are interesting, individualistic people.



I personally would not want to spend much time with an old person.



## OP

**Instructions:** Please rate the extent to which you agree or disagree with each of the following statements. Please place an **X** on the line above the number that best represents how you think, feel, or act. Remember- your answers will be kept confidential.

It would probably be better if most old people lived in residential units with people of their own age.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

There is something different about most old people; it's hard to figure out what makes them tick.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Most old people get set in their ways and are unable to change.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Most old people would prefer to quit work as soon as pensions or their children can support them.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Most old people tend to let their homes become shabby and unattractive.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

It is foolish to claim that wisdom comes with old age.



Old people have too much power in business and politics.



Most old people make one feel ill at ease.



Most old people bore others by their insistence on talking about the "good old days."



Most old people spend too much time prying into the affairs of others and giving unsought advice.



If old people expect to be liked, their first step is to try to get rid of their irritating faults.



In order to maintain a nice residential neighborhood, it would be best if too many old people did not live in it.



There are a few exceptions, but in general most old people are pretty much alike.



Most old people should be more concerned with their personal appearance; they're too untidy.



Most old people are irritable, grouchy, and unpleasant.



Most old people are constantly complaining about the behavior of the younger generation.



Most old people make excessive demands for love and reassurance.



## M-C SDS

**Instructions:** Please answer whether the following statements are True or False. Place an **X** on the line above the letter **T** to indicate True OR an **X** on the line above the letter **F** to indicate False. Remember- your answers will be kept confidential.

\_\_\_\_      \_\_\_\_  
T        F      Before voting I thoroughly investigate the qualifications of all the candidates.

\_\_\_\_      \_\_\_\_  
T        F      I never hesitate to go out of my way to help someone in trouble.

\_\_\_\_      \_\_\_\_  
T        F      It is sometimes hard for me to go on with my work, if I am not encouraged.

\_\_\_\_      \_\_\_\_  
T        F      I have never intensely disliked anyone.

\_\_\_\_      \_\_\_\_  
T        F      On occasion I have had doubts about my ability to succeed in life.

\_\_\_\_      \_\_\_\_  
T        F      I sometimes feel resentful when I don't get my way.

\_\_\_\_      \_\_\_\_  
T        F      I am always careful about my manner of dress.

\_\_\_\_      \_\_\_\_  
T        F      My table manners at home are as good as when I eat out in a restaurant.

\_\_\_\_      \_\_\_\_  
T        F      If I could get into a movie without paying and be sure I was not seen, I would probably do it.

\_\_\_\_      \_\_\_\_  
T        F      On a few occasions, I have given up doing something because I thought too little of my ability.

\_\_\_\_      \_\_\_\_  
T        F      I like to gossip at times.

\_\_\_\_      \_\_\_\_  
T        F      There have been times when I felt like rebelling against people in authority even though I knew they were right.

\_\_\_\_      \_\_\_\_  
T        F      No matter who I'm talking to, I'm always a good listener.

- T  F I can remember "playing sick" to get out of something.
- T  F There have been occasions when I took advantage of someone.
- T  F I'm always willing to admit it when I make a mistake.
- T  F I always try to practice what I preach.
- T  F I don't find it particularly difficult to get along with loud-mouthed, obnoxious people.
- T  F I sometimes try to get even rather than forgive and forget.
- T  F When I don't know something I don't at all mind admitting it.
- T  F I am always courteous, even to people who are disagreeable.
- T  F At times I have really insisted on having things my own way.
- T  F There have been occasions when I felt like smashing things.
- T  F I would never think of letting someone else be punished for my wrongdoings.
- T  F I never resent being asked to return a favor.
- T  F I have never been irked when people expressed ideas very different from my own.
- T  F I never make a long trip without checking the safety of my car.
- T  F There have been times when I was quite jealous of the good fortune of others.
- T  F I have almost never felt the urge to tell someone off.

I am sometimes irritated by people who ask favors of me.  
T      F

          I have never felt that I was punished without cause.  
T      F

          I sometimes think when people have a misfortune they only got what they  
T      F deserved.

          I have never deliberately said something that hurt someone's feelings.  
T      F

## APPENDIX C

## Instructions:

Race relations are a very important issue, because prejudice and discrimination continue to exist, sometimes in subtle ways. One way that people can overcome the scourge of prejudice is by continually being vigilant for biased tendencies in their own attitudes, opinions, and behavior. Your opinions are important to us. We ask that you express your own attitudes and opinions, keeping in mind the possibility that we are all vulnerable to racial biases.

Did you read the directions above? Circle your answer below.

Yes, I have read the instructions above.

No, I did not read the instructions above.

## Demographics

**Instructions:** Please **write or circle** the answer that best fits you.

Please write in your age in the following blank space. \_\_\_\_\_

Please circle your gender.

Male

Female

Please circle your ethnicity.

Caucasian

African American

Hispanic or Latino

Asian American

Native American

Other

Please circle your level of education.

No high school

Some high school

High school graduate

Some college

College graduate

Graduate level degree

Higher (PhD/MD/etc.)

Please circle your level of occupation.

Higher executives, business owner over 100K, major professionals

Business managers, mid-size business owners, lesser professionals

Administrative personnel, small business owners, minor professionals

Clerical and sales workers, technicians, owners of little businesses (under 6,000)

Skilled manual employees

Machine operators and semi-skilled employees

Students, unskilled employees, and housewives

Please circle which of the following choices best describes your upbringing, overall, in terms of socio-economic standing.

Lower class standing

Lower middle class standing

Middle class standing

Upper middle class standing

Upper class standing

## Experience

**Instructions:** Please place answer the following questions about yourself by placing an **X** on the line above the choice that best represents your experience.

On a typical day, how many Black individuals do you communicate with?

\_\_\_\_\_  
0            1            2-3            4-7            8+

How many Blacks did you know while growing up?

\_\_\_\_\_  
None            Very few            Some            Quite a few            A lot

How much do you know about traditional African American history, culture, and customs (e.g. Harlem Renaissance, Black Arts Movement, Soul Food, Kwanzaa)?

\_\_\_\_\_  
Nothing            Very little            Some            Quite a bit            A lot

## ATB

**Instructions:** Please rate the extent to which you agree or disagree with each of the following statements. Please place an **X** on the line above the number that best represents how you think, feel, or act. Remember- your answers will be kept confidential.

If a black were put in charge of me, I would not mind taking advice and direction from him or her.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

If I had a chance to introduce black visitors to my friends and neighbors, I would be pleased to do so.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

I would rather not have blacks live in the same apartment building I live in.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

I would probably feel somewhat self-conscious dancing with a black in a public place.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

I would not mind it at all if a black family with about the same income and education as me moved in next door.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

I think that black people look more similar to each other than white people do.



Interracial marriage should be discouraged to avoid the “who-am-I?” confusion which the children feel.



I get very upset when I hear a white make a prejudicial remark about blacks.



I favor open housing laws that allow more racial integration of neighborhoods.



It would not bother me if my new roommate was black.



It is likely that blacks will bring violence to neighborhoods when they move in.



I enjoy a funny racial joke, even if some people might find it offensive.



The federal government should take decisive steps to override the injustices blacks suffer at the hands of local authorities.



Black and white people are inherently equal.



Black people are demanding too much too fast in their push for equal rights.



Whites should support blacks in their struggle against discrimination and segregation.



Generally, blacks are not as smart as whites.



I worry that in the next few years I may be denied my application for a job or a promotion because of preferential treatment given to minority group members.



Racial integration (of schools, businesses, residences, etc.) has benefitted both whites and blacks.



Some blacks are so touchy about race that it is difficult to get along with them.



## MRS

**Instructions:** Please rate the extent to which you agree or disagree with each of the following statements. Please place an **X** on the line above the number that best represents how you think, feel, or act. Remember- your answers will be kept confidential.

It is easy to understand the anger of black people in America.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Blacks have more influence upon school desegregation plans than they ought to have.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Blacks are getting too demanding in their push for equal rights.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Over the past few years blacks have gotten more economically than they deserve.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Over the past few years the government and news media have shown more respect to blacks than they deserve.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Blacks should not push themselves where they're not wanted.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Discrimination against blacks is no longer a problem in the United States.



## ABS

**Instructions:** Please rate the extent to which you agree or disagree with each of the following statements. Please place an **X** on the line above the number that best represents how you think, feel, or act. Remember- your answers will be kept confidential.

The root cause of most of the social and economic ills of Blacks is the weakness and instability of the Black family.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Although there are exceptions, Black urban neighborhoods don't seem to have strong community organization or leadership.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

On the whole, Black people don't stress education and training.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Many Black teenagers don't respect themselves or anyone else.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Blacks don't seem to use opportunities to own and operate little shops and businesses.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Very few Black people are just looking for a free ride.

_____	_____	_____	_____	_____	_____	_____	_____	_____
-4	-3	-2	-1	0	1	2	3	4
Strongly Disagree		Somewhat Disagree		Neither		Somewhat Agree		Strongly Agree

Black children would do better in school if their parents had better attitudes about learning.



Blacks should take the jobs that are available and then work their way up to better jobs.



One of the biggest problems for a lot of Blacks is their lack of self-respect.



Most Blacks have the drive and determination to get ahead.



## M-C SDS

**Instructions:** Please answer whether the following statements are True or False. Place an **X** on the line above the letter **T** to indicate True OR an **X** on the line above the letter **F** to indicate False. Remember- your answers will be kept confidential.

\_\_\_\_    \_\_\_\_  
T        F        Before voting I thoroughly investigate the qualifications of all the candidates.

\_\_\_\_    \_\_\_\_  
T        F        I never hesitate to go out of my way to help someone in trouble.

\_\_\_\_    \_\_\_\_  
T        F        It is sometimes hard for me to go on with my work, if I am not encouraged.

\_\_\_\_    \_\_\_\_  
T        F        I have never intensely disliked anyone.

\_\_\_\_    \_\_\_\_  
T        F        On occasion I have had doubts about my ability to succeed in life.

\_\_\_\_    \_\_\_\_  
T        F        I sometimes feel resentful when I don't get my way.

\_\_\_\_    \_\_\_\_  
T        F        I am always careful about my manner of dress.

\_\_\_\_    \_\_\_\_  
T        F        My table manners at home are as good as when I eat out in a restaurant.

\_\_\_\_    \_\_\_\_  
T        F        If I could get into a movie without paying and be sure I was not seen, I would probably do it.

\_\_\_\_    \_\_\_\_  
T        F        On a few occasions, I have given up doing something because I thought too little of my ability.

\_\_\_\_    \_\_\_\_  
T        F        I like to gossip at times.

\_\_\_\_    \_\_\_\_  
T        F        There have been times when I felt like rebelling against people in authority even though I knew they were right.

\_\_\_\_    \_\_\_\_  
T        F        No matter who I'm talking to, I'm always a good listener.

- T  F I can remember "playing sick" to get out of something.
- T  F There have been occasions when I took advantage of someone.
- T  F I'm always willing to admit it when I make a mistake.
- T  F I always try to practice what I preach.
- T  F I don't find it particularly difficult to get along with loud-mouthed, obnoxious people.
- T  F I sometimes try to get even rather than forgive and forget.
- T  F When I don't know something I don't at all mind admitting it.
- T  F I am always courteous, even to people who are disagreeable.
- T  F At times I have really insisted on having things my own way.
- T  F There have been occasions when I felt like smashing things.
- T  F I would never think of letting someone else be punished for my wrongdoings.
- T  F I never resent being asked to return a favor.
- T  F I have never been irked when people expressed ideas very different from my own.
- T  F I never make a long trip without checking the safety of my car.
- T  F There have been times when I was quite jealous of the good fortune of others.
- T  F I have almost never felt the urge to tell someone off.

I am sometimes irritated by people who ask favors of me.  
T      F

          I have never felt that I was punished without cause.  
T      F

          I sometimes think when people have a misfortune they only got what they  
T      F deserved.

          I have never deliberately said something that hurt someone's feelings.  
T      F

## VITA

Nicholas Matthew Wisdom

Candidate for the Degree of

Doctor of Philosophy

Dissertation: SOCIAL ACCEPTANCE OF AGE DISCRIMINATION

Major Field: Clinical Psychology

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Clinical Psychology at Oklahoma State University, Stillwater, Oklahoma in July, 2010.

Completed the requirements for the Master of Science in Clinical Psychology at Oklahoma State University, Stillwater, Oklahoma in 2008.

Completed the requirements for the Bachelor of Science in Psychology at Oklahoma Christian University, Edmond, Oklahoma in 2005.

Experience:

Predoctoral internship at Yale University	July, 2009-June, 2010
Neuropsychology Practicum Intern	September, 2008-June, 2009.
Assistant Director of Assessment Services	July, 2007-July, 2008
Psychological Associate	August, 2005-June, 2009

Professional Memberships:

Association for Behavioral and Cognitive Therapies (ABCT)

American Psychological Association (APA): Division 40

International Neuropsychological Society

Oklahoma Psychological Society (OPS)

Name: Nicholas Matthew Wisdom

Date of Degree: July, 2010

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Pages in Study: 114

Candidate for the Degree of Doctor of Philosophy

Major Field: Clinical Psychology

Scope and Method of Study: Ageism is the systematic stereotyping and discrimination against individuals based on their age. This form of discrimination is widespread and is infused in all aspects of older adults' lives; however, most people perceive it as less serious than other forms of discrimination including race or gender. Currently, there are no studies in the literature indicating ageism is more socially acceptable than racism.

This study hypothesized that individuals would endorse explicit ageist beliefs in both low and high social pressure situations while explicit racist beliefs would drop significantly in the high social pressure condition.

Findings and Conclusions: Findings suggest there is no difference between the level of ageism and racism endorsement regardless of the level of experienced social pressure.

ADVISER'S APPROVAL: John Chaney

---